Recruiting SSA's Disability Beneficiaries for Return-to-Work: Results of the Project NetWork Demonstration

Final Report

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Executive Summary

The Social Security Administration (SSA) initiated Project NetWork in 1991 to test alternative case management approaches to providing rehabilitation and employment services to promote employment among beneficiaries of Social Security Disability Insurance (SSDI) and applicants for and recipients of Supplemental Security Income (SSI) for blind and disabled individuals.

The Project NetWork demonstration was designed as a randomized field experiment through the collaborative efforts of the Office of Disability at SSA and the Office of Assistant Secretary for Planning and Evaluation (ASPE) at the U.S. Department of Health and Human Services (HHS). As the first rigorous evaluation of the effects of vocational rehabilitation (VR) assistance to persons with severe disabilities, the demonstration provides a wide range of information to policy makers, researchers, and other interest groups.

The Project NetWork demonstration operated in eight sites across the country in the early 1990's. Participation in the demonstration was voluntary. In addition, members of the target population were eligible to participate regardless of age, type or severity of disability, or other factors used in traditional vocational rehabilitation programs to screen out candidates judged not to be promising candidates for rehabilitation.

Four distinct service provision models were implemented in Project NetWork, distinguished by different institutional settings and varying staffing arrangements. The SSA Case Manager Model involved the provision of case management services by SSA staff. In the Private Contractor Model, case management services were provided by private rehabilitation organizations under contract to SSA. The State VR Outstationing Model featured provision of case management services by State Vocational Rehabilitation Agencies, with case managers "out-stationed" in local SSA offices. The SSA Referral Manager Model offered a less intensive service, referral management, provided by SSA referral managers who located case management and other services for clients by accessing existing service providers in the local area.

The Evaluation

To allow rigorous evaluation of the project's effectiveness, Project NetWork was designed as a classical experiment with random assignment of demonstration volunteers to either a treatment group (those who were eligible to receive the case/referral management services) or a control group (those who did not receive the services). To increase the incentive to work, both treatment and control group members were offered waivers of certain SSA requirements, thereby

preventing disability benefit suspension or termination for at least one year during participation in the demonstration.

In 1992 Abt Associates Inc. was awarded a contract to evaluate the effects of Project NetWork. The evaluation uses information collected from two in-person surveys of demonstration treatment and control group members, a baseline survey of a sample of eligible nonparticipants, and SSA administrative records, to assess the effects of the demonstration on participant earnings, employment, receipt of disability benefits, and other outcomes. The evaluation also examined the effects of the demonstration waivers.

An earlier evaluation report documented the results of the process analysis that assessed demonstration implementation and operations using data collected from automated information systems maintained by demonstration sites, interviews with local staff during site visits, reviews of a small number of client casefolders, and data on local community characteristics. Other reports describe the net impacts, costs, and benefits of the demonstration and the impacts of the work incentive waivers.

The Current Report

This report presents the analysis of participation in Project NetWork. The goal of the analysis is to provide an understanding of the characteristics of individuals who responded to the demonstration outreach and chose to volunteer. The report addresses a question which is important for interpreting the results of the forthcoming impact and waiver analyses: "Given unlimited access to demonstration participation by individuals with diverse disabilities, labor market experience, and other characteristics, who chooses to participate?" Using data from SSA's administrative data files and the baseline survey of participants and eligible nonparticipants, we calculate the overall rate of response to outreach and participation in the demonstration, and examine differences in these rates among subgroups. We also compare characteristics of those who chose to participate and the eligible population.

Project NetWork Outreach

Outreach mailings to existing SSDI beneficiaries and SSI recipients and in-person solicitation of new SSI applicants during their application for benefits were the two principal methods of outreach used to recruit demonstration participants. Together, more than 80 percent of the participants were recruited through these methods. Other recruitment methods included outreach to newly entitled SSDI beneficiaries, word of mouth, referrals from other agencies or service providers, and outreach to beneficiaries during continuing disability reviews.

Participation in Project NetWork required that eligible individuals take three key steps: respond to demonstration outreach, attend an informational interview with local demonstration staff (referred to in this report as "preapplying"), and volunteer for the demonstration. Those choosing to volunteer were randomly assigned to the treatment group, which received the case/referral management services and the work incentive waivers, or to the control group, which received only the waivers.

Altogether, more than 145,000 eligible individuals were solicited to participate in the demonstration. Of these, 8.1 percent responded to outreach and attended an informational interview, and 4.5 percent participated – that is, were randomly assigned to the treatment or control group within one year of solicitation. This is similar to the 5 percent participation rate in the Transitional Employment Training Demonstration (TETD), undertaken by SSA in the late 1980s to provide employment services to SSI recipients with mental retardation. The TETD demonstration used outreach methods similar to those used in Project NetWork.

The participation rate for Project NetWork is at least partly an artifact of the enrollment quotas given to each site, requiring them to randomly assign 1,080 (920 in one site) individuals during the fifteen-month recruitment phase of the demonstration. Most sites discontinued active client recruitment after reaching their enrollment targets.

Participation Rates Across Subgroups

We examined participation rates across a variety of subgroups defined by program and personal characteristics, including type of benefits received, demographic characteristics, self-reported health status, functional limitations, work limitations, employment experiences, and personal attitudes and outlook. Key findings are summarized below.

Type of Disability Benefits. Concurrent SSDI/SSI beneficiaries had participation rates markedly above the overall average (5.4 percent) while SSI applicants and recipients had participation rates lower than the overall average (4.1 and 4.2 percent, respectively). A virtually identical rate of participation was found for young SSI recipients and applicants (aged 16 to 30) as for the rest of the eligible population.

Demographic Characteristics. The likelihood of participating was significantly and markedly associated with age and education. Those aged 31 to 40 had the highest participation rates, while those over age 50 had the lowest. Higher levels of educational attainment were associated with higher participation rates.

Functional Limitations, Self-Reported Health, Type of Primary Impairment. The baseline survey collected detailed information about functional limitations, self-reported health status, cognitive ability, use of drugs and alcohol, overnight hospital stays, days spent in bed in the

previous year, mental hospital stays, disability-related work limitations, and transportation problems in getting to work. Participation was positively related to: absence of communication, mobility, Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) limitations; higher Mental Status Questionnaire (MSQ) scores; better self-reported health; fewer days spent in bed in the past year; and partial or no disability-related limitations on amount, kind, or intensity of work. In addition, absence of transportation problems that limit work were found to have a significant positive effect on participation. Participation was also more common among individuals who were characterized by the use of illegal drugs and having stayed in a hospital for emotional problems. Finally, eligible individuals were somewhat more likely to participate if their primary impairment was mental rather than physical and if they had been receiving disability benefits for two to five years.

Work History. Participation rates were strongly positively related to how recently the individual had worked and with having worked at least 30 hours per week in the most recent job held in the past 12 months.

Personal Attitudes and Outlook. The baseline survey collected information on a variety of attitudinal measures for those individuals who responded personally to the survey (rather than by proxy). Positive attitudes and outlook in a variety of domains were positively associated with the likelihood of participating in Project NetWork. Significant differences were associated with attitudes toward work, attitudes toward life in general, and locus of control.

Sources and Amounts of Household Income. Receipt of AFDC and food stamps and total household income in the previous year were not significantly associated with participation.

Variations in Patterns of Participation. SSI applicants differed from ongoing recipients in that participants were more likely to be in their forties, to be male and to have musculoskeletal impairments.

Conclusions

Overall, three of the best indicators that a person would *not* volunteer to participate in Project NetWork were presence of severe ADL or IADL disabilities, never having worked, and having reported on the survey that they were unable to work. The best indicator that a person *would* volunteer was having worked more than 30 hours per week in a job in the past 12 months.

To answer the question "Who responded to Project NetWork outreach?" we can therefore divide the eligible population into three groups:

- those with severe ADL or IADL disabilities, who have never worked, or reported that they were unable to work (***very unlikely to participate***);

- those who worked more than 30 hours per week in a job in the last 12 months, do *not* have severe ADL or IADL disabilities, and who reported that they are able to work (***quite likely to participate***); and

- the remainder of the population, i.e. those who do not have severe ADL or IADL disabilities and reported that they are able to work, but did not work at least 30 hours per week in a job in the last 12 months (***moderately likely to participate)***.

These three groups comprise 73 percent, 3 percent, and 24 percent of the eligible population respectively. Their respective Project NetWork participation rates are 2.6 percent, 12.2 percent, and 9.1 percent. Thus we see that there is a large proportion of the population (73 percent) that is quite unlikely to participate, that can be identified by their ADL or IADL disabilities, lack of work history, and reported inability to work. The remaining quarter of the eligible population is much more likely to participate (9.5 percent participation rate overall); it is, however, difficult to sift this 27 percent further into subgroups that have dramatic differences in rates of participation.

CHAPTER ONE
INTRODUCTION

In 1991, the Social Security Administration (SSA) initiated Project NetWork, a federal demonstration program to test alternative methods of providing rehabilitation and employment services to SSA's Disability Insurance (SSDI) beneficiaries and Supplemental Security Income (SSI) disabled and blind applicants and recipients.[1] Project NetWork used a case management approach to provide rehabilitation and employment services and to promote employment in this population.

Project NetWork was designed as a randomized field experiment through the collaborative efforts of the Office of Disability at SSA and the Office of the Assistant Secretary for Planning and Evaluation (ASPE) at the U.S. Department of Health and Human Services (HHS). The demonstration was undertaken by SSA under the research and demonstration authority of section 505(a) of the Social Security Amendments of 1980, P.L. 96-265, and the waiver authority of section 505(a)(3) of that statute and section 1110(b) of the Social Security Act. By conducting the demonstration as a randomized field experiment, SSA took a large step toward substantially expanding what is known about the feasibility and efficacy of rehabilitation and employment services for persons with severe disabilities.

Prior to the demonstration, rehabilitation and employment services were available to SSI recipients and SSDI beneficiaries only through the State Vocational Rehabilitation (VR) programs, under the Rehabilitation Services Administration of the U.S. Department of Education. Traditional vocational rehabilitation practice selected only the most promising candidates for job training. Little success had been achieved in rehabilitating SSI recipients and SSDI beneficiaries through these programs.[2] Project NetWork sought to test whether participation in VR services could be substantially increased among beneficiaries and whether VR interventions could be designed to result in substantial increases in return-to-work at a feasible cost. Project NetWork's goal was to provide unlimited access to program participation regardless of the type or severity

1 The definition of disability used to determine eligibility for benefits is the same for both programs. Other features of the programs differ. The SSDI program is a social insurance program covering disabled wage earners, who have worked long and recently enough to be covered by social security employment. Unearned income and other resources do not prevent individuals from qualifying for benefits. The SSI program, on the other hand, is a means-tested program with no work prerequisite. The SSI program serves low-income elderly, blind, and disabled people with little or no income or other resources. Individuals eligible for SSDI whose incomes fall below guidelines for SSI can receive both SSDI and SSI benefits.

2 For example, Muller (1992) found that 2.8 percent of a cohort of SSDI beneficiaries who were initially entitled for benefits from mid-1980 to mid-1981 were terminated from benefits because of work. Of those, nearly one-third had returned to the rolls by 1990.

of disabilities, age, or other factors that may have been seen by service providers as reducing the potential for successful rehabilitation. In addition to case management/referral management services, the demonstration waived specific program rules considered to act as work disincentives. The demonstration marked the first time that SSA provided services directly to its client population to help them enter or reenter the workforce. Project NetWork is also the first rigorous, large-scale evaluation of alternative methods of providing such VR services.[3]

Project NetWork tested four distinct models for providing employment and rehabilitation services, distinguished by different institutional settings and varying staffing arrangements:

- Model 1, the SSA Case Manager Model, featured the provision of case management services by SSA staff.

- Model 2, the Private Contractor Model, also offered case management services, but delivered by private rehabilitation organizations under contract to SSA.

- Model 3, the VR Outstationing Model, featured the provision of case management services by State Vocational Rehabilitation Agencies, with case managers "out-stationed" in local SSA offices.

- Model 4, the SSA Referral Manager Model, offered a less intensive service, referral management, provided by SSA staff. Referral managers were to locate case management and other services for clients by accessing existing service providers in the community.

Each of the four models was operated for 24 months in two sites during the early to mid-1990s:

Model		Sites
Model 1:	SSA Case Manager Model	Dallas and Ft. Worth
Model 2:	Private Contractor Model	Phoenix/Las Vegas and Minneapolis
Model 3:	State VR Outstationing Model	New Hampshire and Richmond
Model 4:	SSA Referral Manager Model	Tampa/Carrollwood, FL and Spokane, WA/Coeur d'Alene, ID

Recruitment occurred over a 15-month period, with Model 1 the first to implement the project in June 1992, followed by the other models in early 1993. The last site concluded operations in April 1995.

In 1992, Abt Associates Inc. was awarded a contract to evaluate the effects of Project NetWork. The six-year evaluation features a randomized experimental design and the collection of various

3 Rupp, Bell, McManus (1994).

types of data: SSA administrative data; automated MIS data from the demonstration sites; information on the demonstration from visits to sites; and in-person interviews with treatment and control group members. A full description of the design of the evaluation is provided in Bell *et al.* (1994). As discussed in that report, the evaluation will assess the impacts of Project NetWork on earnings and employment, receipt of transfer payments, and other outcomes of interest to policymakers, including the costs and benefits of the demonstration. A process analysis was completed in 1996, assessing the implementation and operations of the demonstration in the test sites.[4] This report presents the participation analysis component of the Project NetWork evaluation. Subsequent reports will assess the impacts of the demonstration's waiver provisions on the employment and earnings of participants, and the net impacts, costs, and benefits of the demonstration.

In this introductory chapter we provide a context for the report by reviewing participation rates in other programs similar to Project NetWork, outline the goals of the participation analysis, explain the participation decision process and our research hypotheses, and describe our data sources.

1.1 Participation Rates in Similar Programs

Normal SSA reimbursement rules provide strong financial incentives for state VR agencies to serve only those SSI recipients and SSDI beneficiaries whom they believe can be successfully rehabilitated (with sustained monthly earnings above substantial gainful activity (SGA), currently $500).[5] Of the roughly 15 percent of new SSDI beneficiaries referred by SSA to VR as potential rehabilitation candidates in 1983,VR staff considered half unpromising and did not attempt to contact them. Of the other half, the majority of persons contacted declined services. As a result, only 13 percent of those referred to VR eventually signed an application to receive VR services—less than 2 percent, or 1 in every 50, new SSDI beneficiaries.[6] Project NetWork represents an attempt to determine how open enrollment and self-selection will affect participation.

The only similar program for which a rigorous evaluation was conducted is the Transitional Employment Training Demonstration (TETD).[7] The TETD was undertaken by SSA in the late

4 Wood, *et al.* (1996)

5 In addition to receiving 80 percent of the cost of services for all beneficiaries served (from the Rehabilitation Services Administration of the U.S. Department of Education), state VR agencies qualify for 100-percent additional funding for every SSDI and SSI beneficiary who earns $500 or more ($930 for blind individuals in 1994) for at least nine consecutive months following placement. Thus, if reimbursements claims are approved by SSA, the state comes out ahead by 80 percent of the cost of serving successfully rehabilitated beneficiaries rather than behind by 20 percent. It receives no reimbursement from SSA for those never placed in employment.

6 U.S. General Accounting Office (1987).

7 Decker and Thornton (1994).

1980's to assist persons with mental retardation to increase their economic and social self-sufficiency through employment. It served SSI recipients who were between the ages of 18 and 40 years old, had a diagnosis of mental retardation in their SSI files, and lived in one of the demonstration service areas—a much narrower segment of the disability population than that served by Project NetWork. Eight organizations were selected to provide TETD services in thirteen communities across the nation. Invitation letters similar to those used in Project NetWork (discussed in Chapter 2) were sent to approximately 13,800 eligible recipients identified by screening over 30,000 SSI case folders, offering the following to interested volunteers: waivers of SSI regulations so that participants could maintain their eligibility for SSI benefits; placement in potentially permanent competitive jobs; on-the-job training that was gradually reduced over time; and post-placement support and follow-up as needed for job retention. In addition to these initial invitation letters, follow-up letters, telephone calls, and outreach to service providers in the communities were also used to recruit participants. Like Project NetWork, participation in TETD was strictly voluntary. A total of 2,404 recipients expressed some interest in the demonstration, and a total of 745—approximately 5 percent of the eligible population—volunteered for enrollment in the demonstration.

1.2 Goals of the Participation Analysis

The Project NetWork participation analysis examines the overall rate of participation in the demonstration, differences in this rate across subgroups, and differences in characteristics between those who chose to participate and the eligible population as a whole.

The focus of this report is on the participation rates of distinct subsets of the SSI and SSDI populations. Thus, for example, we will compare the participation rates of individuals with different types of disability. In viewing such comparisons, it is important bear in mind that these subgroups may differ in a number of other characteristics—e.g., age, education, and work experience. Thus, differences in behavior across subgroups reflect more than just the characteristic on which the subgroup was defined.

Project NetWork participation consists of three steps taken by SSDI beneficiaries and SSI recipients and applicants who are eligible to participate: responding to demonstration outreach, attending an informational interview (“preapplying”), and volunteering for the project. Those choosing to volunteer were then randomly assigned to the treatment group that received demonstration services and waivers, or to the control group that received only the waivers. This process is reviewed in detail in Chapter Two. For volunteers assigned to the treatment group, participation decisions extend past random assignment, as case/referral managers decide which, if any, services are appropriate for each client. This report, however, will focus only on participation through random assignment to the treatment or control group. The impact analysis in the final evaluation report will describe what happens to participants after random assignment.

We need to learn as much as we can about Project NetWork participation for a number of reasons:

- Individual participation decisions determine who receives the demonstration's work incentive waivers and case/referral management services and, therefore, how large the demonstration's effects will be on the overall caseload.

- Participation patterns may suggest ways to streamline or target outreach efforts more effectively, either to focus on groups with the greatest interest in working or to increase participation among the least served groups. How this information is ultimately used depends on a crucial choice to be made by policymakers: whether the primary goal of return-to-work programs is cost-effectiveness in the deployment of case/referral management resources, or alternatively, the establishment of an expectation that disabled individuals should try to work.

- Finally, an understanding of participation will guide an important component of the waiver impact analysis—that component which compares individuals who choose to participate (and therefore receive the waivers) and those who do not.

1.3 The Participation Decision Process and Research Hypotheses[8]

This section discusses the Project NetWork participation decision process, the demonstration offer, and research hypotheses that guide the analysis of participation.

General factors affecting employment and rehabilitation decisions. Participation in Project NetWork depends on how the opportunities and incentives offered by Project NetWork are communicated to the eligible population by service suppliers, and how persons with disabilities express demand for those services in response to that information. Under SSA's guidelines, demonstration services were to be made available to all individuals in the demonstration sites. Individual responses to Project NetWork ultimately depended on how eligible individuals viewed the opportunities offered by the demonstration in relation to the alternatives of continuing under regular SSDI and SSI rules, or seeking employment through other means.

There are two important limitations on our ability to relate demonstration participation to individuals' personal characteristics. First, individuals responded to Project NetWork based on the information available to them at the time they made participation decisions. During the early stages of outreach and intake—and perhaps even at the point of volunteering for the project

8 For a more detailed discussion of these issues, see Bell *et al.* (1994).

and/or agreeing to an individual employment plan—many beneficiaries did not have a complete and accurate understanding of the demonstration rules.

Second, the population solicited to participate in Project NetWork is probably quite heterogenous with respect to the factors that affect their demand for rehabilitation services and their resulting participation decisions. Some may give heavy weight to factors that appear to have only secondary importance to researchers and policymakers, while others may lack the cognitive ability to make the rational economic tradeoffs that lie at the foundation of the model. (The latter seems especially likely for those with cognitive or emotional impairments, although the role of guardians or proxies in giving consent to participate should reduce this problem.)

Some, and perhaps many, individuals with impairments may consider that employment of any sort is not possible under any circumstances. For these persons, the Project NetWork offer changes nothing, and we would expect no response to the demonstration from them.

Those who do consider employment a possibility face a more complex situation than nondisabled individuals. We need to recognize, following Oi and Andrews (1992), how disabilities can affect an individual's labor supply and demand for training services:

- Persons with disabilities may have less time available for work or leisure after allowing for necessary maintenance activities (including physician visits, periods of acute illness, and the extra time and effort required for normal activities).

- An individual's productivity may be affected by her or his impairment. As a result, the wage that person can command is typically lower than for other workers.

- Where statutes or custom prevent employer adjustment of wages to reflect perceived lower productivity or higher fringe benefit costs (especially health insurance costs), employment may be more difficult to obtain.

- The individual's costs of employment, including special costs of transportation, assistive devices, and so forth, may be higher.

- Life expectancy may be reduced, and hours worked per week may be lower, lowering the potential returns to training/job search investments.

In addition, people with disabilities may encounter discrimination in the workforce, or believe that they will face discrimination, and this may also affect their employment experiences. We can attempt to capture the effects of some of these factors on the demand for Project NetWork services using data on impairments by diagnostic category (e.g., mental illness, muscular/skeletal impairments) or functional impairment. However, it seems unlikely that we can characterize an

individual's potential wage or available hours with any accuracy based on these factors alone, since those aspects of employment may involve complex interactions of impairments and job requirements. Pre-impairment earnings may also provide little guidance to potential post-impairment earnings and, hence, the value of Project NetWork participation. Recent earnings, necessarily very low for SSI recipients, may also tell us little about potential future earnings, both because levels of disability may vary over time and because of the effect of training and rehabilitation.

Available family support could also materially affect the individual's potential to work, but the simple presence of family members does not indicate the extent to which support is available. Other income sources and, therefore, the financial incentive to work, will also vary by household composition in complex ways.

Despite all these caveats, we can begin the analysis of participation by characterizing interest in employment and in Project NetWork in light of information on:

- type of disability benefits;
- demographic characteristics (gender, age, race, household composition, marital status, education, English language ability);
- length of time receiving disability benefits;
- type of impairment;
- functional limitations and self-reported health status;
- work history;
- other household income, especially income that could decline if earnings increase (e.g., AFDC, food stamps); and
- personal outlook and attitudes toward work.

Other demand factors that might matter, but for which we do not have data, include individuals' own assessments of the potential hours they feel they could work, their potential earnings, and their likely out-of-pocket costs of employment.

Work Incentives under Standard SSDI and SSI Program Rules. Work decisions must also be considered in the context of the SSDI and SSI benefit formulas, which determine the loss of benefits involved in returning to work. For SSDI, that loss is essentially zero up to $500 of earnings per month, net of employment costs. As long as monthly earnings never exceed that

level, SSDI benefits will not be reduced. Past that point, however, earnings disqualify an individual from SSDI benefits following a 9-month trial work period (TWP) and a 3-month grace period. A beneficiary completes a TWP month by earning over $200 per month or performing more than 40 hours of self-employment. Following the 9-month TWP and 3-month grace period, beneficiaries enter a period of extended eligibility lasting for 36 months. During this time, Medicare eligibility is continued and SSDI benefits are reinstated for any month in which earnings fall below $500. In response to these incentives, many beneficiaries who would otherwise have chosen to work additional hours may now reduce hours to hold earnings below $500 per month.

The total income possibilities faced by SSI recipients are somewhat different. SSI benefits are reduced by an amount equal to 50 percent of earnings above $65 per month; this applies immediately, without waiting for a trial work period to elapse. SSI program rules allow benefits to continue beyond $500 of monthly earnings (the "substantial gainful activity level," which is the income threshold for initial eligibility determination). Another provision allows Medicaid benefits to continue after cash benefits end until much higher earnings thresholds are reached.

Both SSI recipients' and SSDI beneficiaries' work and rehabilitation decisions may be further complicated by concerns over loss of health insurance and considerable uncertainty as to ability to sustain employment. Initial employment success may lead to long-term or even permanent losses in income as disability benefits (including medical benefits) are cut off.[9] The SSDI program provides some protection against this risk through its 36-month period of extended eligibility following the TWP, during which reinstatement of benefits is relatively simple. But past that point, delays in requalification and the possibility that requalification will be denied may lead some SSDI beneficiaries never to attempt employment in the first place.

The Demonstration Offer. The waiver provisions of the demonstration removed the threat of loss of benefits and corresponding Medicare coverage for twelve months of employment for all volunteers, irrespective of their earnings, although SSI recipients would still experience a reduction in benefits if they earned more than $65 per month. For SSDI beneficiaries, a special Title II waiver exempted earnings for 12 months when computing trial work period months and prevented benefit suspension for those who had already exhausted their trial work periods. A similar waiver for SSI recipients created a 12-month period during which earnings above $500 per month would not trigger the medical review of disability or blindness that could normally occur at that point. However, during the time of the demonstration, such reviews were not routinely conducted. As a result, the existence of the waivers did not materially alter the situation faced by SSI recipients from what would normally occur under regular rules. Random assignment provided a 50-50 chance of increased access to rehabilitation and employment services. All volunteers for the demonstration received the waiver provisions; those assigned to the treatment

9 In contrast to future earnings streams, future disability benefits are fairly secure. The chances of disqualification from SSDI for medical reasons alone are slim, especially under the current moratorium on regularly-scheduled continuing disability reviews. Future SSI benefits are somewhat more uncertain absent employment, due to the program's $2,000 asset test.

group (half) also received the case management or referral management services available at their site.

The potential value of the demonstration offer in the context of these factors is quite difficult to determine. Consider first the value of the waivers to SSDI beneficiaries who are confident of their future earnings potential. If they expect to earn more than $500 a month over the long run, they should find the waivers attractive as they can collect both their disability benefits and any earnings over an additional 12-month period. In contrast, those who expect to earn less than $500 per month on a sustained basis should not value the waivers at all, as they will not be in a position to benefit from them.

For those who are uncertain about their ability to sustain earnings at any particular level, however, the waivers may be viewed quite differently. For them, the waivers not only increase income during the initial months of employment, but also guard against the loss of benefits if employment is not sustained. This provides SSDI beneficiaries with an opportunity to test the waters of employment without the risks of long-term or even permanent loss of benefits that usually accompany such action. For these individuals, the value of the waivers does not necessarily increase with expected earnings. Those with the lowest probability of sustained earnings may have the most to gain from the waiver guarantees should they decide to make a high-risk attempt at sustained employment.

Now consider the value of increased access to rehabilitation and employment services. On the one hand, we might expect those most likely to make use of such services to value access more. However, Project NetWork offers access to additional training/rehabilitation services that already exist to some degree. So it is possible that those most interested in this type of assistance—those with the highest level of demand—would have found it absent the demonstration and, therefore, value the demonstration offer less, not more. Similarly, while the relatively more able-bodied individuals should be the ones most interested in finding employment, the most able-bodied of this group may have less demand for the additional assistance from case management services.

Because individuals can always refuse NetWork services if assigned to the treatment group, the case/referral management offer would not be expected to have negative value for anyone. Hence, it should not deter those interested only in the waiver provisions from applying to the project.

Research Hypotheses. Based on this assessment of how the opportunity to participate in Project NetWork changes the income and employment options faced by various members of the eligible population, we can posit several hypotheses regarding likely participation patterns:

- More able beneficiaries, in terms of medical status, prior education, and work experience—those most likely to earn substantially more than $500 per month on a sustained basis—are more likely to consider and eventually volunteer for Project

NetWork participation. Those with a positive attitude towards work are also more likely to volunteer.

- Among those with similar expected future earnings, those who are younger (and can therefore expect more years of earnings) are likely to have a greater demand for what the demonstration offers and, therefore, should volunteer more often.

- SSDI and concurrent beneficiaries will be more likely to participate than will SSI recipients or applicants, because of their greater labor force attachment. The SSDI program is for disabled wage earners, and beneficiaries have worked long enough and recently enough to be covered by social security employment. The SSI program has no work prerequisite, serving low income elderly, blind, and disabled people with little or no income or other resources.

- Furthermore, new applicants for SSI may respond more positively to the offer than ongoing recipients both because their long-run disability status is less certain, and on the supply side because the demonstration's offer is made in person rather than by mail.

Specific operational aspects of the demonstration's outreach and intake process suggest several additional hypotheses regarding the supply side of project participation:

- Extra efforts to recruit two- to five-year beneficiaries and young (16-24) SSI recipients and applicants will result in higher participation rates for those groups.

- Different case management models constitute different products and, hence, will elicit different outreach response rates and volunteering rates. These differences may be confounded with other differences among sites, however, including such factors as labor market conditions and Project NetWork outreach strategies.

1.4 Data Sources

To explore these hypotheses, we require data on three populations:

- **Eligibles**: the entire sample population of persons who were solicited for the demonstration and met the eligibility criteria;

- **Preapplicants**: individuals who were solicited for the demonstration, responded, and attended an initial interview with demonstration staff; and

- **Participants**: the subset of the preapplicants who decided to participate and were randomly assigned to treatment and control groups.

Data on these populations come from three sources. First, the SSA administrative program records, taken from the MBR831, SSR831, and MBR810/811 files, provide impairment, diagnostic, and benefit history data for all sample members—the eligible persons solicited for Project NetWork. Second, an automated tracking system developed by SSA specifically for the Project NetWork demonstration, the Case Management Control System (CMCS), was maintained by each of the demonstration sites. The CMCS documents key steps in demonstration participation following random assignment and is used to identify Project NetWork preapplicants. A CMCS record was established for each individual at the time of an initial Project NetWork informational interview—the preapplication stage.[10] Finally, a baseline survey, conducted among a random subsample of individuals solicited for the demonstration, provides more detailed information on demographics, employment, disability status, functional limitations, and personal outlook than is available through the SSA administrative records or CMCS.

In addition to these sources, this report draws site-level data from the process study report, an earlier component of the evaluation.[11] During demonstration operations, Abt Associates evaluation staff conducted a total of four visits to each demonstration site. We interviewed case management unit staff, observed operations, and reviewed a small number of client case folders.

1.5 Overview of Report

The next chapter describes the client recruitment and intake process. Chapter Three presents findings on rates and patterns of participation from tabulations of SSA administrative data, CMCS data from the demonstration sites, and the baseline survey.

10 Demographic data were collected on all treatment and control group members, as well as on project nonparticipants who attended an initial interview with a case manager but subsequently decided not to volunteer. All other CMCS data were collected for treatment group members only. SSA designed and developed the Case Management Control System, the management information system that was used in 6 out of the 8 sites. A seventh site used all of the components of the CMCS except for the purchased services module. The remaining site designed its own system based on the specifications of the CMCS.

11 Wood, *et al.* (1996).

CHAPTER TWO
CLIENT RECRUITMENT AND INTAKE

In order to assess variations in the rates at which eligible individuals chose to participate in the demonstration, it is important to have an understanding of the outreach and intake methods used in the demonstration. In this chapter, we summarize this process, as described in detail in Wood *et al.* (1996).

To be eligible for Project NetWork, an individual had to meet all of the following requirements:

- not be employed or self-employed;
- be a resident of the service area of the demonstration offices;
- be interested in participating in the project; and
- not be actively involved in a formal program designed to result in employment, such as a state VR program.[1]

Clients could enter Project NetWork through two routes, depending on whether they were current SSDI and/or SSI beneficiaries or new SSI applicants. Exhibit 2.1 summarizes the process by which these two groups were invited to join the program.

The SSA Central Office established clear guidelines for demonstration staff that anyone who met these criteria was to be offered the opportunity to volunteer, to avoid any selective intake and to ensure that the results of the demonstration would be fully generalizable to the target population as a whole. On-site monitoring and staff interviews indicate that Project NetWork staff used only these criteria for screening, and did not attempt to screen potential clients further.[2]

SSA established recruitment goals for each site, to ensure adequate sample sizes for the evaluation. All of the sites were originally required to recruit 540 treatment clients and 540 control clients. As a result of the smaller caseload sizes in the Spokane/Coeur d'Alene site, the

1 A program designed just to prepare the person to work at some future time was acceptable. For example, participation in a school-administered vocational program would be considered complementary to the goals of Project NetWork and would not bar participation in NetWork.

2 Kalman Rupp *et al.* (1996), *op. cit.*

target for that site was set at 460 treatment clients and 460 controls. All of the sites except Dallas and Fort Worth met their recruitment goals within the fifteen month period designated for intake. With an extra month of recruitment, Dallas exceeded its goal and Fort Worth came within 72 percent of its target. Altogether, 8,248 people volunteered to participate in Project NetWork and were randomly assigned to the treatment and control groups, with 4,160 assigned to the treatment group, and 4,088 assigned to the control group.

2.1 Beneficiary/Recipient Invitation Letters

Mailings from the SSA Central Office to existing beneficiaries and recipients were the foundation of the client recruitment effort for the demonstration, generating 60 percent of all participants. These mailings contained a letter that described Project NetWork to the beneficiary/recipient and invited him or her to volunteer for the project. Interested individuals were instructed to return a postcard that was enclosed in the mailing, indicating their desire to learn more about the program.

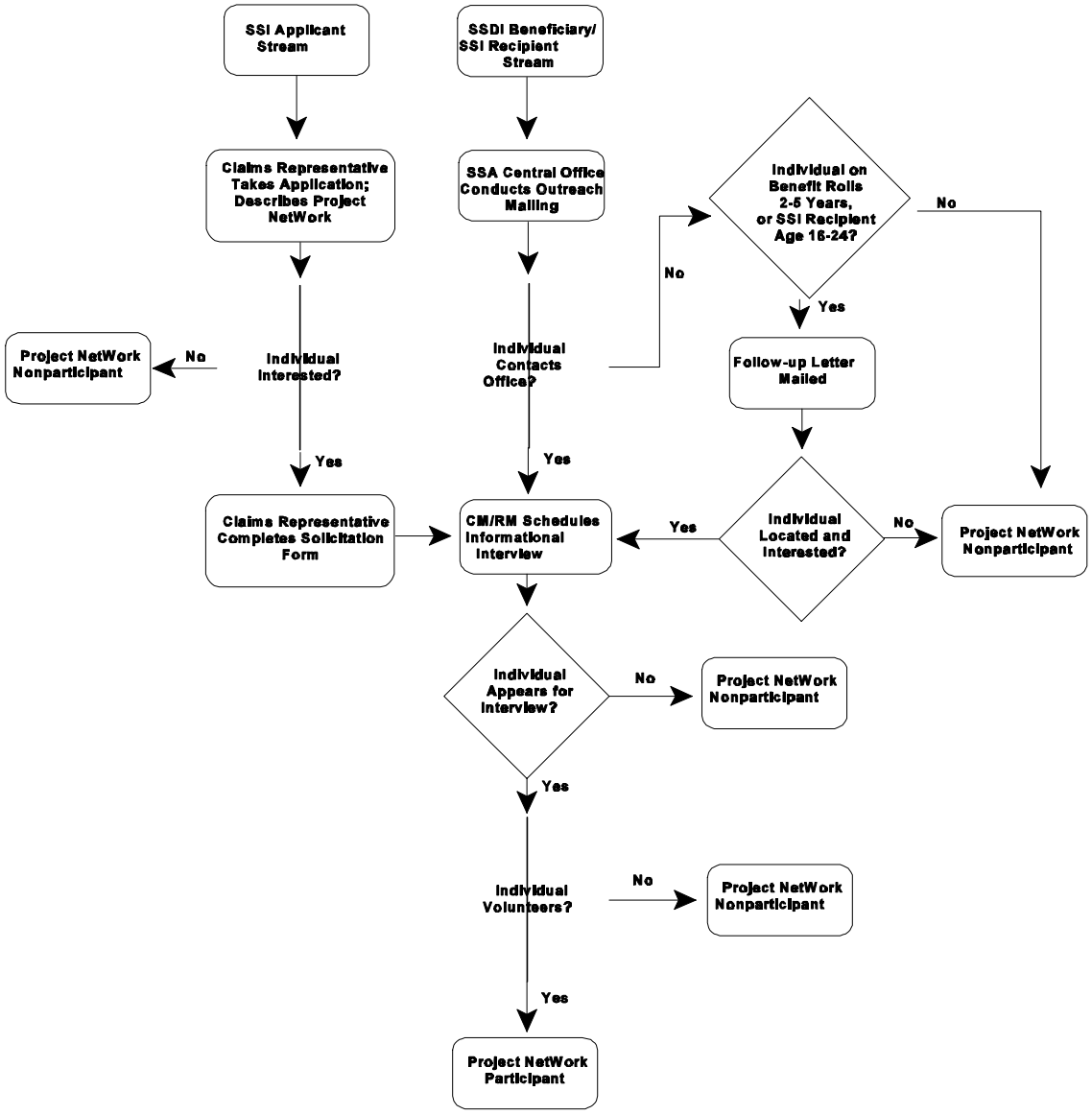
Mailings were planned to occur every three months in each site, for a total of five mailings per site over the 15-month intake period. Each mailing was designed to encompass a 20-percent random sample of the existing caseload at that time. Letters were sent out to clients based on the last digit in their Social Security number: in the first mailing, those with numbers ending 0 or 9 were targeted, the next time those with numbers ending in 1 or 8 were selected, and so on.

In practice, mailings were staggered to meet the needs of each site. Several were delayed to avoid overloading demonstration staff during times of peak intake (so-called "postcard backlogs").[3] Others were canceled or scaled back once it became clear that recruitment goals could be met without them.

The postcard backlogs had consequences for both potential and existing Project NetWork clients. Depending on the size of these backlogs, individuals who returned a postcard waited between two weeks and two months for an informational interview. Case managers reported that some people lost interest in the program while waiting for an interview; the longer the wait, the less

3 In Phoenix/Las Vegas, Minneapolis, Spokane, and New Hampshire, the case/referral managers were not always able to work off the backlog from one mailing before the next scheduled mailing. In fact, during peak periods, the backlog reached 450 to 500 postcards in Phoenix/Las Vegas and Minneapolis. As noted above, SSA responded to the postcard backlogs by postponing or canceling several of the mailings in 1993. In the Phoenix/Las Vegas site, the March 1993 mailing was delayed, one-third of the September mailing was canceled, and the entire December mailing was canceled. In the Minneapolis site, the June 1993 mailing was delayed, and half of the September and December mailings were canceled. In Spokane, half of the September mailing and two-thirds of the December mailing were delayed. In New Hampshire, no letters were mailed to Concord or Portsmouth in June 1993.

Exhibit 2.1
Project NetWork
Recruitment and Intake Process



useful the postcard leads became.[4] Further, because case managers were so focused on working off the backlogs, they reported not having enough time for their existing clients during peak times of intake, sometimes leaving clients without needed support.

2.2 Beneficiary/Recipient Follow-Up Letters

All SSI recipients between the ages of 16 and 24, and all individuals who had received SSI or SSDI benefits for 2 to 5 years, were targeted for additional follow-up. One month after each of the quarterly mailings, staff in each case/referral management unit were scheduled to send out follow-up letters to individuals who met these criteria. The letters were meant to encourage additional participation among these populations, who were of particular interest to SSA policymakers. It was thought that Project NetWork could help youth to transition into employment. It was also thought that those receiving benefits for 2 to 5 years might be more suited for or interested in participation—i.e., be more stable (financially and physically) than new beneficiaries/recipients, yet have more recent work experience than those who had received benefits for a longer period.

These follow-up letters were sent out as scheduled at the beginning of the project. But as the backlogs from the quarterly mailings continued, some sites discontinued their follow-up mailings. On-site monitoring and staff interviews indicate that there was not much response to the follow-up mailings; overall, only 2 percent of all volunteers were recruited through this process.

2.3 SSI Applicant Solicitation

New SSI applicants were the other main Project NetWork intake stream, representing 21 percent of volunteers. In each site, when an individual applied for SSI benefits on the basis of blindness or disability, the SSA claims representative who took the application was expected to give her or him a brief description of Project NetWork and ask if she/he might be interested in participating. The claims representatives were required to fill out an Initial Solicitation Report (ISR)[5] for each applicant and forward that report to the case/referral management unit if the individual was interested in Project NetWork.

In practice, the claims representatives did not make these solicitations uniformly. Field office supervisors and Project NetWork staff tried to get better compliance with the recruitment

4 In Minneapolis, staff tried to maintain prospective clients' interest by having a case aide call everyone who responded to the solicitation and tell them that a case manager would call them soon to schedule an interview.

5 The ISR asked for the date, field office, applicant's name and Social Security number, and the type of application (Title 2, Title 16, or concurrent). The claims representative was instructed to indicate whether or not the individual was interested in Project NetWork by checking the appropriate line on the form, and then sign the report.

requirement by holding meetings with the claims representatives. These meetings had some success, and the case/referral managers generally reported that the process improved over time. SSA field office staff in the Dallas office took the strongest steps to address this problem; the supervisors kept count of the number of applications and ISRs completed each week and mandated that the number of ISRs match the number of applications.

In several of the sites (Phoenix/Las Vegas, Minneapolis, and Spokane), SSI new applicant solicitation was suspended at least once during the recruitment phase. In Phoenix, Las Vegas, Minneapolis, and the Coeur d'Alene office of the Spokane site, the stoppage was due to the magnitude of the postcard backlogs. In Spokane itself, the District Manager suspended the solicitations because they were believed to be unproductive. While other sites did not stop applicant solicitations for this reason, this District Manager's viewpoint was echoed elsewhere. In general, applicants were said by case managers to be less likely than existing beneficiaries to volunteer for Project NetWork, because their health and personal situations were in greater flux than current beneficiaries. Applicants were believed to apply for benefits because they felt that they were too disabled to work, so they did not understand why they were being solicited to participate in a back-to-work program. Some applicants felt that they had to volunteer for Project NetWork or their chance of getting benefits would be hurt, even after being told that participation was strictly voluntary. These applicants sometimes agreed to participate but dropped out of the program once they realized that Project NetWork was truly voluntary. One case manager in Fort Worth said, "If applicants hear that they're getting approved [for benefits], you never hear from them again."

2.4 Other Referral Sources

Individuals also heard about Project NetWork in other ways. Some beneficiaries/recipients learned about the program through word-of-mouth from friends or family who also received benefits (and were recruited). Others attended talks given by Project NetWork staff in various community forums, which described the project and encouraged people to volunteer. Still others learned about the project through staff at outside agencies who were aware of the program.[6] For example, in Spokane the referral managers left their cards at local social service agencies that might serve potential Project NetWork clients. Self-referrals represented 7 percent of volunteers, and other agency referrals, 6 percent.[7]

6 Outside agencies were a major source of referrals in New Hampshire, by design. Two of the eight case managers in that site (those outstationed in the Nashua and Manchester field offices) served only clients referred to them by the local mental health centers operated by each city's Community Council.

7 Self-referrals and referrals from other agencies are excluded from the sample for the participation analysis, as discussed in Chapter 3. Only eligible persons who were solicited for the demonstration are included in the sample.

The demonstration design also established procedures for soliciting new SSDI beneficiaries (referred to as Title 2 allowances) for participation in Project NetWork. Overall, only a small percentage (1 percent) of all volunteers were referred to the demonstration in this manner. According to case/referral managers, new Title 2 beneficiaries tended to be experiencing acute health problems that precluded enrollment in a return-to-work program like NetWork. Beneficiaries who had a continuing disability review or who had completed their trial work period were also solicited for participation. The demonstration was described to these individuals by SSA claims representatives and they were offered the opportunity to volunteer.[8]

2.5 The Intake Process

Locating people who might be interested in Project NetWork was only the first step required to bring clients into the program. Those who expressed interest in the program were then assigned to a case/referral manager, who scheduled an informational interview. In Models 1, 3, and 4, these interviews typically took place in SSA field offices.

According to local demonstration staff, most individuals invited to participate in the demonstration never took the next step of setting up an interview. Only about one half of the people who did set up an interview actually showed up, either the first time they were scheduled or at a later time. The other half decided not to participate before hearing more about the program. Prospective clients who did not show up for an interview and did not respond to follow-up calls were eliminated from the pool of prospective clients.

Individuals who did attend an informational interview received an in-depth description of the program and answers to their questions. The prospective client provided some basic demographic, program, and work history data to the case/referral manager, who entered the information into the CMCS.[9] After these steps, the case/referral manager explained the random assignment process and asked the individual if he or she wanted to volunteer for Project NetWork. Those who wished to participate signed an informed consent form prior to random assignment to the treatment or control group.[10] Control group members were told that they would not receive services through Project NetWork but that they were eligible to use the waivers and other rehabilitation and employment services available in the community. Treatment

8 Rupp *et al.* (1996), *op. cit.*

9 Or the equivalent system in Richmond.

10 Case/referral managers reported that some clients did not fully understand the random assignment process, even though it was explained thoroughly. Case/referral managers used examples to illustrate how random assignment worked, telling them that there was a "group A" (which would receive rehabilitation and employment services and special waivers), and a "group B" (which would receive only the special waivers). They had to label the groups carefully, since "treatment" had a very different meaning in some clients' minds, particularly those with mental illnesses. The case/referral managers then would explain that the process that determined which group they would be in was completely random, like a lottery, and that they had a fifty-fifty chance of getting into either group.

group members scheduled a subsequent meeting with their case/referral manager, at which vocational goals and the steps necessary to attain those goals would be discussed. Those who were not interested left the interview and were identified in the CMCS as nonparticipants. Although nonparticipants still had the option of changing their minds and volunteering later during the recruitment/intake phase of the project, case/referral managers reported that very few did so.

CHAPTER THREE
PATTERNS OF PARTICIPATION

In this chapter we examine how preapplication and participation rates varied by programmatic and personal characteristics, based on data from SSA administrative records, the Case Management Control System (CMCS), and the baseline survey. In general, we find that those who appear to be more employable are more likely to volunteer to participate in Project NetWork, based on such measures as employment in the past 12 months, education, self-reported health, and functional limitations. In addition, participation rates are higher among SSDI beneficiaries than SSI recipients, and among those with mental disabilities than those with physical disabilities.

Details on file construction and sample weights are found in Appendix A. Three features of the data should, however, be noted here. First, our statistical power to detect differences in participation rates is substantially greater for characteristics (such as beneficiary type) that are known for *all* program eligibles than for characteristics (such as functional limitations, attitudes, etc.) that are known only for the much smaller group that was administered the baseline survey. As a consequence, observed differences in rates of a percentage point or less may be statistically significant for the variables drawn from administrative data, while much larger observed differences in rates for the survey variables cannot be reliably distinguished from sampling error. Second, some items in the baseline survey were not collected on individuals who responded *via* a proxy. The tabulations and significance tests for these factors were therefore performed excluding the proxy respondents. Finally, survey data were weighted to correspond to the overall population of eligibles.

3.1 Overall Rates

Out of the 145,404 eligibles, 11,838 persons preapplied and 6,527 participated. The overall *preapplication* rate was thus 8.1 percent (11,838/145,404) and the rate of *participation* was 4.5 percent (6,527/145,404). The *continuation* rate—that is, the proportion of preapplicants who also participated—is thus 55 percent (=4.5/8.1).

It is important to understand that the overall participation rate cannot be viewed as an absolute measure of the attractiveness of Project NetWork to the eligible population. Each site was instructed to recruit applicants, beneficiaries, and recipients into the project on a first-come, first-

served basis *until 1,080 individuals had been randomly assigned* (except in Spokane/Coeur d'Alene, where the recruitment quota was set at 920). Sites could, if they wished, continue to recruit beyond this point, but most sites had to struggle to meet this quota. Excluding Fort Worth, which had the most difficulty in recruiting, the final counts of randomly assigned individuals were closely clustered around 1,000, ranging from 944 (Spokane/Coeur d'Alene) to 1145 (Dallas). Thus, the participation rate in each site was pretty nearly definitionally 1,000 divided by the number of eligibles during the intake period; and the participation rate overall was pretty nearly definitionally 8,000 divided by the number of eligibles during the intake period.

The relationship between participation rates and the size of the eligible population was not exactly definitional for several reasons: many of the 8,248 randomly assigned individuals were not solicited from the eligible population; one site fell substantially short of the target; and one site (Phoenix/Las Vegas) which filled its quota early did not solicit the final 20 percent of ongoing recipients and beneficiaries and stopped attempting to recruit new SSI applicants. Nonetheless, we believe that differences in the participation rate among sites (and, therefore, among models) in general tell us more about variations across sites in the number of eligibles than about the appeal of the various models of service delivery or differential labor market opportunities.

The site-specific participation rates presented in this chapter should be viewed with this caveat in mind. Even with this limitation, however, we believe that these rates provide some useful information. They can, for example, be viewed as lower bounds on the participation rates that would have occurred in a program with unconstrained enrollment. Moreover, site-specific preapplication rates are less subject to this limitation than are participation rates at the site level. Therefore, in the following section, we present both preapplication and participation rates for the demonstration sites.

Variations in participation rates among subgroups defined by other characteristics reveal more about the relative attractiveness of the demonstration to different types of beneficiaries and recipients. An important feature of recruitment in all the sites is that it was on a first-come, first-served basis. Regardless of their characteristics, once individuals expressed interest in Project NetWork they were deemed suitable for random assignment. Consequently, *within* sites, any differences in participation rates among groups can validly be attributed to differences in desire to participate (combined in some cases with extra encouragement from staff, e.g. followup letters to some subgroups). This is as true for groups that are defined programmatically—e.g. SSDI beneficiaries *versus* SSI recipients—as it is for groups that are defined by personal attributes—e.g. individuals with mental *versus* physical disabilities. It is therefore of interest to explore how participation rates varied among subgroups, taking the overall rate of 4.5 percent as a benchmark. While we cannot be sure that the same *quantitative* relationships would hold if higher or lower quotas had been set—e.g., if the sites had been told to randomly assign 1500 individuals, and had intensified their recruitment process as a result—we believe that the *qualitative* relationships described in the remainder of this chapter correctly reflect underlying patterns of the level of interest among disabled individuals in a return-to-work program.

3.2 Demonstration Model and Site

This section presents preapplication and participation rates and frequencies for key segments of the eligible population defined by demonstration model and site. The first two columns of Exhibit 3.1 show the *rates* of preapplication and participation for specific subgroups. Asterisks are used to mark statistically significant differences in these rates among all of the mutually exclusive, collectively exhaustive subgroups comprising each category. When the comparisons involve more that two groups, the asterisks refer to an F-test of the hypothesis that the percentages are the same for all of the groups. The last three columns show the *proportion* that each subgroup comprises of the eligible, preapplicant, and participant populations, adding up to 100 percent in each case.

Exhibit 3.1
Preapplication and Participation Rates, by Model and Site

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Model				(***)	(***)
SSA Case Manager	9.2	5.1	21.1	23.8	23.9
Private Contractor	5.3	3.5	33.2	26.1	21.5
State VR Outstationing	9.7	5.4	19.3	23.3	22.9
SSA Referral Manager	9.8	4.6	26.3	26.9	31.7
Site				(***)	(***)
Dallas	8.4	5.3	12.0	14.2	12.4
Fort Worth	10.2	4.7	9.2	9.6	11.5
Minneapolis	5.4	3.7	16.4	13.3	10.9
New Hampshire	7.5	5.4	6.5	7.8	6.0
Phoenix/Las Vegas	5.2	3.4	16.9	12.8	10.7
Richmond	10.8	5.4	12.8	15.5	17.0
Spokane/Coeur d'Alene	11.1	5.3	10.7	12.7	14.6
Tampa/Carrollwood	8.9	4.1	15.6	14.2	17.1
Overall	8.1	4.5	100.0	100.0	100.0
Sample Size	145,404	145,404	145,404	6,527	11,838

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

For example, beginning with the first two columns of row 1, we see that 9.2 percent of the eligibles in the SSA Case Manager Model applicants preapplied to the demonstration, and 5.1

percent participated in Project NetWork. Moving to the next three columns, we see that while eligibles in the SSA Case Manager Model sites comprised 21.1 percent of all eligibles, they represented 23.9 percent of preapplicants and 23.8 percent of participants. The last two rows of the exhibit show the overall rates and sample sizes.

As noted above, these rates cannot be viewed as absolute indicators of the attractiveness of Project NetWork to the eligible population. Each site, and therefore each model, had a fixed enrollment target; when this target was reached, demonstration intake stopped.[1] At that point, an unknown number of individuals who had been contacted by outreach had not yet reached the point of deciding whether to volunteer for the demonstration. They can, however, be viewed as lower bounds on the participation rates that would have occurred in a program with unconstrained enrollment.

The *preapplication* rates, which were not constrained by intake quotas, do, however, provide an indication of the relative responsiveness of demonstration eligibles to Project NetWork across sites and models. As shown in Exhibit 3.1, the rate of preapplication varied across sites, from a high of 11.1 percent in Spokane/Coeur d'Alene, to a low of 5.2 percent in New Hampshire. In addition, preapplication rates varied between the two sites within the demonstration models. For example, for the two VR Outstationing model sites, Richmond had a rate of 10.8 percent, while New Hampshire had a substantially lower rate of 7.5 percent.

Spokane/Coeur d'Alene, Richmond and Fort Worth had the highest preapplication rates, all above 10 percent. However, these sites also had comparatively low continuation rates (50 percent or lower). In contrast, New Hampshire and Minneapolis had relatively low preapplication rates (5.2 and 5.4 percent, respectively), but relatively high continuation rates (65 and 69 percent, respectively). This indicates that while initial response to the demonstration was lower in New Hampshire and Minneapolis, those who did make it to the preapplication stage were more likely to volunteer than preapplicants in other sites. This was, of course, necessary if all sites were to meet their fixed enrollment targets. This variation in continuation rates may reflect staff in the sites with high preapplication rates screening out "excess" applicants or more effective "selling" of the demonstration during the initial interviews in the sites with low preapplication rates, or some combination of the two.

3.3 Beneficiary Type and Young SSI Status

Preapplication and participation rates among groups defined by type of beneficiary and young SSI status are displayed in Exhibit 3.2.

1 All sites except Dallas and Fort Worth met their recruitment target within the fifteen month period designated for intake. With an additional month of intake, Dallas exceeded its goal and Fort Worth achieved 72 percent of its target. In Phoenix/Las Vegas, the enrollment target was reached early and the final mail solicitation was canceled in that site.

Beneficiary type: Concurrent beneficiaries participated at the highest rate, 5.4 percent, followed by SSDI beneficiaries (4.7 percent), SSI applicants (4.2 percent), and SSI recipients (4.1 percent). The rate of participation was thus 32 percent higher for the concurrent recipients than for SSI recipients (5.4/4.1=1.32). The rates of preapplication followed the same ranking according to beneficiary type. Continuation rates were highest for the concurrent beneficiaries, at 58 percent, but for all types of beneficiaries, continuation clustered around the overall mean of 55 percent. The SSDI beneficiary group comprised nearly half of the total sample (at 43 percent), followed by SSI applicants (29 percent), SSI recipients (20 percent), and concurrent beneficiaries (8 percent).

Young SSI applicants and recipients: The participation rate for the young SSI group (4.6 percent) was virtually the same as that for the rest of the sample. The continuation rate of 57 percent was slightly above average. This group includes SSI applicants, SSI recipients, and concurrent beneficiaries aged 16 to 30. They are contrasted with a group consisting of older SSI applicants and recipients (including older concurrent beneficiaries) and SSDI beneficiaries of all ages.

In summary, statistically significant variation occurred in preapplication and participation rates according to type of beneficiary but not with regard to young SSI status. A participation rate markedly above the overall average (5.4 percent) was seen for concurrent beneficiaries (receiving both SSI and SSDI benefits). Rates below the overall average were observed for SSI applicants and recipients (4.2 and 4.1 percent, respectively).

The differences by beneficiary type, although statistically significant, may be thought to be quantitatively small. Yet in terms of client flow the differences are indeed considerable. The 1.3 percentage point difference in participation rates between concurrent beneficiaries and SSI recipients corresponds to a *32 percent* difference [2] in the percent of individuals who need to be served—clearly an important distinction for program managers who are providing case management or referral services.

2 5.4 percent / 4.1 percent = 1.32, ie., 5.4 is 32 percent greater than 4.1.

Exhibit 3.2
Preapplication and Participation Rates by Beneficiary Type and Young SSI Status

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Beneficiary Type				(***)	(***)
SSI Applicant	7.8	4.2	29.0	27.1	27.9
SSI Recipient	7.3	4.1	20.0	18.2	17.9
SSDI Beneficiary	8.5	4.7	43.5	45.7	45.5
Concurrent	9.3	5.4	7.6	9.1	8.7
Young SSI				(ns)	(ns)
Applicant/Recipient	8.1	4.6	16.0	16.2	15.8
All Other Sample Members	8.2	4.5	84.0	83.8	84.2
Overall	8.1	4.5	100.0	100.0	100.0
Sample Size	145,404	145,404	145,404	6,527	11,838

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

3.4 Demographic Characteristics

The administrative data contained information on three basic demographic characteristics of eligible individuals: gender, age, and race. The baseline survey contained additional information on respondents' household composition, marital status, English language ability, and education. These data were used to examine differences in participation rates for various subgroups, as shown in Exhibit 3.3.

Gender: Overall, men were 11 percent (4.7/4.2=1.11) more likely to participate than were women. Men represented 55 percent of eligibles and 58 percent of participants.

Age: Persons between the ages of 31 and 40—approximately one quarter of the eligible population—had the highest rate of participation (5.6 percent). Lower, but still above average, rates of participation were seen for those who were younger (16 to 30) and somewhat older (41 to 50). The oldest group, 51 to 65, comprising 28 percent of eligibles, had the lowest

Exhibit 3.3
Rates of Participation By Demographic Characteristics

Characteristic	Proportion of eligibles with characteristic that participated	Frequency of characteristic among ... Eligibles	Participants
Gender (a)	(***)		
Male	4.7%	55.4%	57.9%
Female	4.2	44.6	42.1
Age (a)	(***)		
16 to 30	4.9	19.5	21.5
31 to 40	5.6	25.5	31.9
41 to 50	4.7	26.6	27.8
51 to 65	3.0	28.4	18.8
Race (a)	(***)		
White	4.4	69.0	66.9
Black	5.0	26.1	29.3
Other	3.5	5.0	3.8
Household composition (b)			
Lives alone	4.6	31.0	31.7
Lives with others	4.4	69.0	68.3
Marital status (b)			
Married	4.2	25.0	23.2
Separated/widowed/divorced	4.6	37.3	38.2
Never married	4.6	37.6	38.6
English language ability (b)			
Native speaker	4.5	91.7	92.9
Speaks English most of the time	6.3	3.5	4.9
Does not speak English most of the time	2.1	4.8	2.2
Education (b)	(**)		
Less than high school	3.4	45.8	34.9
High school graduate	4.7	32.4	33.3
Some college	6.5	15.4	22.2
Post secondary degree	6.7	6.4	9.6
Overall (a)	4.5%	100.0%	100.0%
Sample size (a)	145,404	145,404	6,527
Sample size (b)	2,983	2,983	2,148

NOTES: * Statistically significant difference among categories at the 10 percent level.
** Statistically significant difference among categories at the 5 percent level.
*** Statistically significant difference among categories at the 1 percent level.

SOURCE: (a) SSI and SSDI benefits files.
(b) Baseline survey of sample of Project NetWork eligibles.

participation rate, at 3.0 percent. Thus those aged 31 to 40 were nearly twice as likely to participate as those over 50 [3].

Race: Blacks, about a quarter of the eligible population, were 16 percent more likely to participate than whites (5.0 *versus* 4.4 percent).

Household composition: About a third of eligibles lived alone. They were not significantly more or less likely to participate than other individuals.

Marital status: A quarter of eligibles were currently married. The remainder were roughly evenly divided between never married and formerly married. Marital status was not a significant indicator of participation.

English language ability: The great majority of eligibles (92 percent) were native English speakers. This factor was not found to be associated with the likelihood of participation.

Education: Nearly half of all eligibles (46 percent) had less than a high school education. Better educated individuals were significantly more likely to participate ($p < 0.05$). Those with at least 16 years of education were nearly twice as likely to participate than those with fewer than 12 years (6.7 *versus* 3.4 percent).

In summary, the likelihood of participation was significantly and markedly associated with individuals':

- age (highest for those aged 31 to 40, lowest for those over age 50); and
- education (with greater education corresponding to higher rates).

Significant but numerically smaller effects were seen for gender and race (with males and blacks more likely to participate than females and whites).

3 As discussed in Wood *et al.*, 1996, we made limited comparisons between the characteristics of the Project NetWork treatment group and the SSDI and SSI beneficiaries/recipients who terminated successfully from State VR Programs between October 1990 and September 1991. The purpose of these comparisons was to place the Project NetWork sample in the context of the national population of SSI and SSDI beneficiaries who receive VR services. In general, Project NetWork clients were older than those served by the State VR programs, with 14 percent of State VR clients under the age of 21 compared with only 3 percent of Project NetWork clients. (The ages for VR participants are approximate due to differently defined categories in the source data; percentages for reported age categories assumed a uniform distribution of ages within each source category.) Altogether, 53 percent of NetWork clients were less than 40 years old, compared with 72 percent of those served by State VR. A full 18 percent of NetWork treatment group was between 51 and 60 years of age, compared with only 8 percent of SSI recipients and SSDI beneficiaries served by the State VR.

3.5 Health, Functional Limitations, and Work Limitations

The baseline survey collected detailed information on functional limitations, self-reported health status, cognitive ability, use of drugs and alcohol, overnight hospital stays and days in bed in the past year, mental hospital stays, disability-related work limitations, and transportation problems in getting to work. Some of these measures were not collected when the interviews were conducted with proxy respondents, however (cognitive ability, use of drugs and alcohol, mental hospital stays).

In addition, administrative data were available on the primary impairment type and number of months receiving disability benefits.

In relating participation rates to continuous variables such as degree of disability, there is clearly a degree of arbitrariness in defining the subgroups. The participation rates for the "most" and "least" disabled groups depend on the cutoffs used to define these groups. We have attempted to achieve some degree of consistency across domains by including one category for each measure that comprises those that are not disabled at all, and then dividing the remainder of the population roughly in half.

Functional limitations: Information was available on functional disabilities in four areas. These were:

- Communication: sight, hearing, speech, using the telephone
- Mobility: physical strength, climbing, walking
- Activities of daily living (ADLs): getting around inside the home, getting around outside the home, getting in and out of a bed or chair, bathing, dressing, eating, using the toilet
- Instrumental activities of daily living (IADLs): personal finances, preparing meals, doing light housework

In constructing scales for each of these domains, a person who could do a task (such as speak on the telephone) only with some difficulty or with help was assigned one point for that disability, while a person who could not do it at all was assigned two points.

As displayed in Exhibit 3.4, all four of the functional limitation measures were statistically significant indicators of participation, with individuals lacking disabilities of each type being roughly twice as likely to participate as individuals with severe disabilities ($p < 0.05$). For example, with regard to communication disabilities, we find a participation rate of 5.5 percent for the nondisabled group, *versus* 3.0 percent for the severely disabled group (defined as the

half of the eligible population with the greatest communication disability after excluding those with none). Thus, the nondisabled group is 87 percent more likely to participate. The corresponding participation rates for mobility disabilities were 6.1 for the nondisabled *versus* 3.3 percent for the severely disabled. For ADLs the rates were 5.6 *versus* 2.6 percent, and for IADLs, 5.7 *versus* 2.4 percent.

Self-reported health: Individuals with good to excellent health were markedly more likely to participate than those in fair or poor health ($p < 0.01$). Those in the top third of distribution were 143 percent more likely to participate than those in the bottom third (6.1 *versus* 2.5 percent).

Nights in hospital, days in bed: About a third of the population was hospitalized in the past year. Time spent in the hospital was not significantly related to participation. Over a third of the population spent more than 30 days in bed in the past year. This subgroup participated in Project NetWork at a rate of only 3.3 percent, compared with 5.3 to 5.4 percent for those who spent fewer days in bed ($p < 0.10$).

Proxy respondent: Individuals with proxy respondents were substantially less likely to participate; their rate was only 1.5 percent. It is likely that the use of a proxy indicates a serious disability. For example, 46 percent of individuals with proxy respondents had a IADL disability score of 3 or more ("severe") compared with less than 20 percent of individuals who did not use a proxy. These individuals are excluded from some of the comparisons that follow, as noted below. When they are removed from the sample, the overall participation rate is 4.9 percent rather than 4.5 percent.

Mental status: The Mini Mental State Examination (MMSE) is used as a screener for cognitive impairment. The MMSE was developed by Folstein & McHugh (1975). It includes questions such as "What is the year?" and tasks such as copying a geometric figure. The maximum score was 29 and the mean score among those who answered this battery of questions was about 26. Excluding proxy respondents, individuals scoring at least 27 out of 29 on the MMSE had significantly higher participation rates than those scoring 26 or less (6.0 *versus* 3.3 percent; $p < 0.05$).

Exhibit 3.4
Rates of Participation By Health, Functional Limitations, and Work Limitations

Characteristic	Proportion of eligibles with characteristic that participated	Frequency of characteristic among ...	
		Eligibles	Participants
Communication disability (score: 0-8) (b)	(**)		
None (0)	5.5%	44.9%	55.5%
Mild (1)	4.4	25.3	24.8
Severe (2-8)	3.0	29.8	19.7
Mobility disability (score: 0-6) (b)	(**)		
None (0)	6.1	28.1	38.1
Mild (1-2)	4.9	24.1	26.3
Severe (3-6)	3.3	47.8	35.6
ADL (activities of daily living) disability (score: 0-14) (b)	(**)		
None (0)	5.6	46.2	58.1
Mild (1-2)	4.7	23.2	24.2
Severe (3-14)	2.6	30.6	17.7
IADL (instrumental activities of daily living) disability (score: 0-6) (b)	(**)		
None (0)	5.7	47.1	59.6
Mild (1-2)	4.2	29.7	28.0
Severe (3-6)	2.4	23.2	12.4
Health status (b)	(***)		
Excellent/very good/good	6.1	33.8	46.2
Fair	4.7	34.4	36.0
Poor	2.5	31.8	17.9
Nights in hospital in past year (b)			
None	4.2	67.5	63.1
1 to 9 days	4.9	17.0	18.6
10+ days	5.3	15.5	18.3

Exhibit 3.4 *(Continued)*

Characteristic	Proportion of eligibles with characteristic that participated	Frequency of characteristic among ...	
		Eligibles	Participants
Days in bed in past year (b)	(*)		
0 to 7	5.3	44.3	51.4
8 to 30	5.4	19.2	22.5
31+	3.3	36.5	26.1
Proxy respondents	(**)		
Yes	1.5	11.9	4.1
No	4.9	88.1	95.9
MMSE (Mini Mental State Examination) (score: 0-29) (c)	(**)		
Higher score (27-29)	6.0	57.7	71.1
Lower score (0-26)	3.3	42.3	28.9
Excessive drinking (c)			
Yes	5.8	34.3	40.5
No	4.5	65.7	59.5
Used non-prescribed drugs at least 5 times (c)	(**)		
Yes	6.6	32.0	43.0
No	4.1	68.0	57.0
Ever stayed overnight in a hospital for an emotional problem (c)	(**)		
Yes	6.4	26.5	34.4
No	4.4	73.5	65.6
Primary impairment (a)	(***)		
Musculoskeletal	4.2	13.6	12.7
Neurological	4.7	5.4	5.6
Mental	5.0	38.3	42.4
Other	4.6	32.6	33.1
Years receiving disability benefits (a)	(***)		
Zero (no benefits received yet)	4.2	24.5	22.9
< 2 years	4.6	17.5	17.9
2 to 5 years	5.3	22.0	25.9
>5 years	4.2	36.0	33.4

Exhibit 3.4 *(Continued)*

Characteristic	Proportion of eligibles with characteristic that participated	Frequency of characteristic among ... Eligibles	Participants
Not able to work at all because of physical, mental, or other health condition (b)	(***)		
Yes	1.9	51.7	21.6
No	7.3	48.3	78.4
Not able to work at all (b)	(***)		
Yes	1.7	61.8	23.0
No	9.0	38.2	77.0
Time elapsed since onset of disability (b)	(*)		
Not disabled	6.7	13.6	20.3
Disabled before ever employed	3.3	18.7	13.7
Disabled less than 5 years	4.9	30.9	33.8
Disabled more than 5 years or after retirement	3.9	36.9	32.2
Transportation problems getting to work (b)	(*)		
Yes	3.8	44.8	37.7
No	5.2	55.2	62.3
Overall (a)	4.5%	100.0%	100.0%
Sample size (a)	145,404	145,404	6,527
Sample size (b)	2,983	2,983	2,148
Sample size (c)	2,739	2,739	2,049

NOTES:
* Statistically significant difference among categories at the 10 percent level.
** Statistically significant difference among categories at the 5 percent level.
*** Statistically significant difference among categories at the 1 percent level.

SOURCE:
(a) SSI and SSDI benefits files.
(b) Baseline survey of sample of Project NetWork eligibles.
(c) Baseline survey of sample of Project NetWork eligibles, excluding proxy respondents.

Excessive drinking, illegal drugs, overnight stays in a mental hospital: These three topics were addressed with nonproxy respondents only. Excessive drinking was measured by an affirmative response to one or more of three items:

- Did you ever think that you were an excessive drinker?
- Have you ever drunk as much as a fifth of liquor in one day?
- Has there ever been a period of two weeks when every day you were drinking seven or more beers, seven or more drinks or seven or more glasses of wine?

Use of illegal drugs was measured by an affirmative response to the following item:

- Have you ever used one of these drugs on your own (to get high or without a prescription, or more than was prescribed) more than five times in your life?

The list of drugs that followed included marijuana, tranquilizers, cocaine, psychedelics, and others.

Finally, mental hospitalization was addressed by the following item:

- Have you ever had to stay overnight in a hospital because you had emotional problems?

All three of these factors were *positively* related to participation. Those who engaged in excessive drinking, used nonprescription drugs at least 5 times, or had ever stayed overnight in a mental hospital had participation rates of 5.8, 6.6, and 6.4 percent, respectively. The results for the use of nonprescription drugs and stays in a mental hospital were statistically significant ($p < 0.05$).

Primary impairment: Administrative data on all 145,404 eligibles indicated that the primary impairment was mental for 38 percent of individuals, musculoskeletal for 14 percent, and neurological for 5 percent. The remaining 33 percent of individuals had some other primary impairment.[4] The participation rate was highest among those with mental impairments (5.0 percent) and lowest among those with musculoskeletal impairments (4.2 percent).

Years receiving disability benefits: Special outreach efforts (follow-up mailings) were made toward SSI recipients and SSDI beneficiaries who had been receiving disability benefits for

4 These included: infectious and parasitic diseases; neoplasms; endocrine and metabolic disorders; diseases of the blood and blood forming organs; eye, ear, skin or subcutaneous diseases; diseases of the circulatory, respiratory, digestive, or genitourinary systems; perinatal disease; complications of pregnancy; congenital anomalies; and injury.

two to five years. This group comprised 22 percent of eligibles, and had a higher than average participation rate of 5.3 percent. Those who were not receiving benefits at the time of solicitation (one quarter of eligibles) and those who had been receiving benefits for more than five years (more than a third of eligibles) had participation rates of only 4.2 percent. Thus the two-to-five year group were about 26 percent more likely to participate than new or long-term beneficiaries. However, as we discussed in Chapter 2, only a relatively small percentage of all volunteers were recruited from the follow-up mailing process. In addition, while the mailings were conducted as scheduled in the beginning of the demonstration, several sites discontinued them as backlogs from the quarterly mailings grew. As a result, it is not clear that the more intensive outreach intended for this group was actually conducted.

Disability limitations on work: Respondents were asked about their ability to work in two ways. The first series of questions began:

- Do you have a physical, mental, or other health condition which limits the kind or amount of work you can do at a job?

If they answered in the affirmative, they were then asked:

- Do you have a physical, mental, or other health condition which prevents you from working at all in any kind of job or business?

Half of all eligibles (52 percent) responded "yes" to both these questions—that is, they said they could not work *at all* because of their disability.

Respondents were also asked a series of three questions about the intensity and type of work they could do:

- Are you now able to work at a full-time job or are you only able to work part-time?

- Are you now able to work regularly or are you only able to work occasionally or irregularly?

- Are you now able to do the same kind of work you did before your work limitation began?

One possible response to these questions was "not able to work". A greater number of respondents than before (62 percent) indicated that they were unable to work. This may not be contradictory with the previous proportion because no reference was made to health or disability.

Individuals who, in response to either of these sets of questions, indicated that they were unable to work were very unlikely to participate in Project NetWork (rates of less than 2 percent). The complementary subgroups, i.e. those who reported that they were only partially or not at all limited in their ability to work, participated at rates of 7.3 to 9.0 percent. The responses to these two series of questions were thus among the strongest indicators of participation in Project NetWork ($p < 0.01$).

Time elapsed since the onset of the disability was not systematically related to participation (once those who were reportedly not disabled were excluded). Transportation problems in getting to work (which may or may not be disability-related) did reduce the likelihood of participating ($p < 0.10$).

In summary, participation was markedly and significantly increased by:

- absence of communication, mobility, ADL, and IADL disabilities;
- higher MMSE scores;
- better self-reported health;
- fewer days spent in bed in the past year;
- partial or no limitations on amount, kind, or intensity of work; and
- absence of transportation problems in getting to work.

In addition, eligible individuals were somewhat more likely to participate if:

- their primary impairment was mental rather than physical; and
- they had been receiving disability benefits for two to five years.

Participation was also more common among individuals who were characterized by:

- use of nonprescription drugs; and
- having stayed in a hospital for emotional problems.

The finding with regard to hospitalization for emotional problems is undoubtedly a reflection of the higher participation rate among those whose primary impairment was mental rather than physical.

3.6 Work History

Greater attachment to the labor force was associated with a higher likelihood of participating in Project NetWork (Exhibit 3.5).

Recent work: Those who had worked in the past 12 months participated in Project NetWork at a rate of 6.8 percent, 167 percent higher than for individuals who had never worked (2.6 percent; $p < 0.05$).

Intensity of recent work: Even among those who had worked in the past 12 months, those who had worked over 30 hours per week were considerably more likely to participate in Project NetWork than those who had worked fewer than 30 hours (11.0 *versus* 4.8 percent; $p < 0.01$).

Weeks worked in the past year, years worked for pay, predisability earnings: None of these three measures was strongly associated with participation, once those who had not worked at all or in the past 12 months were excluded.

Annual Earnings. The Master Earnings File is another source of data, providing information on calendar year earnings reported by employers for SSA-covered employment for Project NetWork eligibles. To protect confidentiality, these data were available only for predefined groups of 10 to 19 individuals. Consequently, it is not possible to compare participation rates among subgroups of the eligible population with different levels of earnings in the pre-demonstration period.

We can, however, examine the mean earnings of participants and nonparticipants as a whole. Comparing pre-demonstration earnings for these two groups, we find that in both 1990 and 1991 participants had lower average earnings.[5] It must be borne in mind however, that these average values include both predisability and postdisability earnings. The differences therefore combine the effects of earnings levels and recentness of disability. We cannot tell whether the higher mean earnings of nonparticipants in this period reflects higher earnings among those who were on the disability rolls in those years, higher earnings among those who were not yet on the disability rolls, or compositional differences relative to Project NetWork participants.

5 The annual earnings levels for participants and nonparticipants were:

Participants, 1990: $4,035
Nonparticipants, 1990: $4,608
Participants, 1991: $3,077
Nonparticipants, 1991: $3,693

Exhibit 3.5
Rates of Participation by Employment History

Characteristic	Proportion of eligibles with characteristics that participated	Frequency of characteristic among ... Eligibles	Participants
When last employed	(**)		
Currently or within last 12 months	6.8%	17.9%	26.9%
Ever	4.3	70.0	66.3
Never	2.6	12.1	6.8
Hours per week of most recent job in last 12 months	(***)		
Up to 30 hours	4.8	12.2	12.9
Over 30 hours	11.0	5.7	13.8
Didn't work in last 12 months	4.1	82.1	73.3
Weeks worked in last 12 months	(**)		
None	4.1	82.4	73.3
Up to 20 weeks	7.1	10.4	16.3
More than 20 weeks	6.6	7.2	10.4
Years worked for pay			
None	2.6	12.3	6.9
Up to 10 years	4.4	35.2	34.2
Over 10 years	5.1	52.5	58.9
Predisability earnings	(**)		
Zero	3.8	68.9	56.7
Up to $6 per hour	6.4	16.6	23.0
Over $6 per hour	6.5	14.5	20.3
Overall	4.5%	100.0%	100.0%
Sample size	2,983	2,983	2,148

NOTES: * Statistically significant difference among categories at the 10 percent level.
** Statistically significant difference among categories at the 5 percent level.
*** Statistically significant difference among categories at the 1 percent level.

SOURCE: Baseline survey of sample of Project NetWork eligibles.

In summary, participation rates were strongly related to:

- how recently the individual had worked; and
- having worked at least 30 hours per week in the most recent job in the past 12 months.

3.7 Personal Attitudes and Outlook

Data were collected on a variety of attitudinal measures for those individuals who responded to the survey personally (not by proxy). It should be recalled that the overall participation rate for non-proxy respondents was 4.9 percent. For forming subgroups, the population was divided in half after deleting the proxy respondents. These findings are displayed in Exhibit 3.6.

Attitude toward work: Attitudes toward work were measured by averaging the responses to 11 statements (such as "I get bored when I don't have a job") on a five point scale: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree. Those with more positive attitudes (average scores of 4 or greater) were 101 percent more likely to participate (8.1 *versus* 4.0 percent; $p < 0.01$).

Attitude toward life in general: General attitudes were measured by averaging the responses on a four-point scale to 20 statements about how the respondent felt or behaved during the past week (such as "I felt lonely" or "My sleep was restless"). Those with more positive attitudes were 56 percent more likely to participate (6.0 *versus* 3.9 percent; $p < 0.05$).

Depression: Individuals who reported that they "felt sad much of the time in the past year" were no more or less likely to participate.

Feelings and emotions: A scale was constructed based on responses on a 6-point scale to five items referring to feelings and emotions during the last month (e.g., "How much of the time during the last month have you felt calm and peaceful?"). Individuals with more positive feelings were not significantly more likely to participate in Project NetWork.

Locus of control: A scale was constructed based on responses to 12 statements on a scale of 1 to 5 (e.g., "Good luck is more important than hard work for success"). Those with a greater sense of control (3.5 or more) were 54 percent more likely to participate (6.0 *versus* 3.9 percent; $p < 0.05$).

In summary, positive attitudes and outlook in a variety of domains were positively associated with the likelihood of participating in Project NetWork. Significant differences were associated with:

- attitudes toward work;
- attitudes toward life in general; and
- locus of control.

Exhibit 3.6
Rates of Participation by Personal Attitudes and Outlook

Characteristic	Proportion of eligibles with characteristic that participated	Frequency of characteristic among ... Eligibles	Participants
Proxy respondent	(**)		
Yes	1.5%	11.9%	4.1%
No	4.9	88.1	95.9
Attitude toward work (scale: 1-5)	(***)		
More positive (4+)	8.1	24.8	39.9
Less positive (<4)	4.0	75.2	60.1
Attitude toward life in general (scale: 1-4)	(**)		
More positive (3+)	6.0	50.0	60.8
Less positive (<3)	3.9	50.0	39.2
Felt sad much of the time in the past year			
Yes	4.7	48.3	45.8
No	5.2	51.7	54.2
Feelings and emotions (scale: 1-6)			
More positive (4+)	5.6	53.3	60.1
Less positive (<4)	4.2	46.7	39.9
Locus of control (scale: 1-5)	(**)		
Greater sense of control (3.5+)	6.0	50.5	61.0
Less sense of control (<3.5)	3.9	49.5	39.0
Overall	4.5%	100.0%	100.0%
Sample size	2,739	2,739	2,049

NOTES: * Statistically significant difference among categories at the 10 percent level.
** Statistically significant difference among categories at the 5 percent level.
*** Statistically significant difference among categories at the 1 percent level.

SOURCE: Baseline survey of sample of Project NetWork eligibles.

3.8 Sources and Amounts of Household Income

There was little variation among SSI recipients and concurrent beneficiaries in the level of disability benefits *per se*. Among those receiving only SSI , 66 percent received exactly $434 in the month preceding solicitation; and among concurrent beneficiaries, 62 percent received exactly $454. Somewhat more variation is seen among those receiving only SSDI, whose payment depends on prior earnings. The median benefit for this group was $602, and 31 percent received within $100 of this amount. Exhibit 3.2 displays participation rates by type of benefit received.

Data on receipt of AFDC and food stamps and total household income were obtained from the baseline survey. Participation rates for these subgroups are shown in Exhibit 3.7.

AFDC and food stamps: Receipt of benefits from these sources was not significantly associated with participation.

Annual household income: Level of household income was not significantly associated with participation.

Exhibit 3.7
Rates of Participation by Income and Benefits

Characteristic	Proportion of eligibles with characteristic that participated	Frequency of characteristic among ... Eligibles	Participants
AFDC income last month			
Yes	4.5%	8.0%	7.9%
No	4.6	92.0	92.1
Food Stamps income last month			
Yes	5.2	37.2	42.5
No	4.2	62.8	57.5
Estimated annual household income			
Up to $10,000	4.3	55.6	50.6
Over $10,000	5.3	44.4	49.4
Overall	4.5%	100.0%	100.0%
Sample size	2,983	2,983	2,148

NOTES: * Statistically significant difference among categories at the 10 percent level.
** Statistically significant difference among categories at the 5 percent level.
*** Statistically significant difference among categories at the 1 percent level.

SOURCE: Baseline survey of sample of Project NetWork eligibles.

3.9 Variations in Patterns of Preapplication and Participation

The SSI and SSDI benefits files are a rich source of information on variations in patterns of preapplication and participation by beneficiary type, by site, and by young SSI status. The personal characteristics that can be examined in these files include participants' age, sex, race, primary impairment, and prior receipt of benefits.

Exhibit 3.8 presents preapplication rates for the entire eligible sample, along with information on participation rates from Exhibits 3.2 and 3.3. We see that preapplicants were significantly younger than the eligible population from which they were drawn, and participants even more so. Both preapplicants and participants were more likely to be male, and less likely to be white. The continuation rates by sex and race were quite similar, as can be seen from the virtually identical frequency distributions of these characteristics among preapplicants and participants.
With regard to primary impairment, a more complex pattern is seen. Eligibles whose impairment was musculoskeletal or mental were equally likely to preapply (8.4 percent); but those whose impairment was mental were substantially more likely to participate (5.0 *versus* 4.2 percent).

Finally, both preapplication and participation were most frequent among those who had received benefits for two to five years prior to solicitation—i.e., those who were neither new to the disability rolls nor long-term recipients.

3.9.1 Variations by beneficiary type

Exhibits 3.9 through 3.12 present the same information for four types of beneficiaries: those who were solicited as new SSI applicants, as SSI recipients, as SSDI beneficiaries, and as concurrent beneficiaries. For all four of these groups, we see that eligibles over age 50 were relatively unlikely to preapply or participate. Among SSI applicants, however, both preapplicants and participants were concentrated among those in their thirties and forties, while in the other three groups, preapplicants and participants were concentrated among those aged 40 and under. Higher preapplication and participation rates for males were seen among SSI applicants and, to a much lesser extent, in the other three groups. Racial differences (i.e., lower preapplication and participation rates among whites) were most pronounced among SSDI and concurrent beneficiaries.

The patterns of preapplication and participation by primary impairment differ considerably among the four types of beneficiaries. Among SSI applicants, those with musculoskeletal and neurological impairments are especially likely to preapply. Among SSDI beneficiaries, these two groups are *less* likely to preapply than others. Participation rates also show different patterns. Among SSI applicants, those with musculoskeletal impairments are most likely to participate; those with neurological impairments among SSI recipients; and those with mental

Exhibit 3.8
Preapplication and Participation Rates by Personal Characteristics: All Cases

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	8.6	4.9	19.5	21.5	20.6
31-40	9.5	5.6	25.5	31.9	29.9
41-50	8.3	4.7	26.6	27.8	27.2
51-65	6.4	3.0	28.4	18.8	22.4
Sex				(***)	(***)
Male	8.4	4.7	55.4	57.9	57.5
Female	7.8	4.2	44.6	42.1	42.5
Race				(***)	(***)
White	7.9	4.4	67.1	65.1	65.3
Black	9.3	5.0	25.4	28.5	29.0
Other	5.6	3.5	4.8	3.7	3.3
Missing	6.9	4.4	2.7	2.7	2.3
Primary impairment				(***)	(***)
Musculoskeletal	8.4	4.2	13.6	12.7	14.1
Neurological	8.7	4.7	5.4	5.6	5.8
Mental	8.4	5.0	38.3	42.4	39.6
Other	8.5	4.6	32.6	33.1	33.9
Missing	5.3	2.7	10.2	6.2	6.6
SSI/SSDI benefit receipt prior to solicitation				(***)	(***)
0 mos	7.8	4.2	24.5	22.9	23.4
<2 yrs	8.5	4.6	17.5	17.9	18.3
2-5 yrs	9.5	5.3	22.0	25.9	25.6
>5 yrs	7.4	4.2	36.0	33.4	32.7
Overall	8.1	4.5	100.0	100.0	100.0
Sample Size	145,404	145,404	145,404	6,527	11,838

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.9
Preapplication and Participation Rates by Personal Characteristics: SSI Applicants

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	7.3	4.1	27.2	26.9	25.5
31-40	8.4	4.7	28.0	31.5	30.0
41-50	8.9	4.8	23.9	27.4	27.1
51-65	6.5	2.9	20.9	14.2	17.4
Sex				(***)	(***)
Male	8.5	4.7	52.6	58.7	57.0
Female	7.1	3.7	47.4	41.3	43.0
Race				(ns)	(***)
White	7.9	4.2	57.8	58.3	58.1
Black	8.4	4.3	30.9	31.7	33.3
Other	5.7	3.7	7.1	6.3	5.2
Missing	6.5	3.8	4.1	3.7	3.5
Primary impairment				(***)	(***)
Musculoskeletal	10.0	5.0	15.4	18.3	19.8
Neurological	9.2	4.6	4.1	4.6	4.9
Mental	7.5	4.4	34.8	36.1	33.2
Other	7.7	4.0	39.5	37.6	38.6
Missing	4.5	2.3	6.2	3.4	3.5
SSI/SSDI benefit receipt prior to solicitation				(ns)	(ns)
0 mos	7.8	4.2	84.5	84.3	83.9
<2 yrs	8.5	4.3	9.6	9.8	10.5
2-5 yrs	7.8	4.1	2.5	2.5	2.5
>5 yrs	7.3	4.2	3.3	3.3	3.1
Overall	7.8	4.2	100.0	100.0	100.0
Sample Size	42,164	42,164	42,164	1,769	3,302

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.10
Preapplication and Participation Rates by Personal Characteristics: SSI Recipients

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	8.2	4.7	31.2	35.6	34.9
31-40	8.5	4.9	25.1	29.9	29.3
41-50	7.1	4.1	21.7	21.8	20.9
51-65	4.9	2.4	22.1	12.7	14.9
Sex				(ns)	(*)
Male	7.6	4.2	45.4	47.1	47.2
Female	7.1	4.0	54.6	52.9	52.8
Race				(***)	(***)
White	7.3	4.2	59.5	61.3	59.2
Black	8.5	4.4	27.5	29.6	32.1
Other	4.0	2.0	7.7	3.7	4.2
Missing	6.2	4.2	5.3	5.4	4.5
Primary impairment				(***)	(***)
Musculoskeletal	7.8	4.5	5.4	6.0	5.8
Neurological	9.3	5.1	4.7	5.9	6.0
Mental	7.6	4.4	48.7	52.0	50.7
Other	8.0	4.5	20.4	22.3	22.2
Missing	5.4	2.7	20.8	13.8	15.3
SSI/SSDI benefit receipt prior to solicitation				(**)	(***)
<2 yrs	7.7	4.1	17.2	17.5	18.2
2-5 yrs	8.4	4.6	29.0	33.0	33.2
>5 yrs	6.6	3.8	53.8	49.5	48.6
Overall	7.3	4.1	100.0	100.0	100.0
Sample Size	29,019	29,019	29,019	1,185	2,121

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.11
Preapplication and Participation Rates by Personal Characteristics: SSDI Beneficiaries

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	10.9	6.6	8.2	11.5	10.5
31-40	10.8	6.5	23.0	31.8	29.0
41-50	8.5	4.8	31.1	31.7	31.0
51-65	6.7	3.1	37.7	25.0	29.5
Sex				(ns)	(ns)
Male	8.6	4.7	62.6	62.9	62.9
Female	8.5	4.7	37.4	37.1	37.1
Race				(***)	(***)
White	8.1	4.4	77.0	71.5	72.8
Black	10.4	6.0	19.8	24.9	24.2
Other	6.9	4.5	2.3	2.1	1.8
Missing	9.8	6.7	1.0	1.4	1.1
Primary impairment				(***)	(***)
Musculoskeletal	7.6	3.7	17.1	13.2	15.2
Neurological	8.1	4.3	6.7	6.2	6.4
Mental	9.2	5.5	33.5	39.1	35.9
Other	9.1	4.9	35.0	36.6	37.2
Missing	5.8	3.0	7.7	4.9	5.2
SSI/SSDI benefit receipt prior to solicitation				(***)	(***)
<2 yrs	8.6	4.7	23.4	23.3	23.7
2-5 yrs	9.9	5.4	30.6	35.1	35.4
>5 yrs	7.6	4.3	46.0	41.5	40.9
Overall	8.5	4.7	100.0	100.0	100.0
Sample Size	63,220	63,220	63,220	2,982	5,391

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.12
Preapplication and Participation Rates by Personal Characteristics: Concurrent Beneficiaries

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	10.8	6.1	24.2	27.6	28.0
31-40	10.5	6.5	31.1	37.7	35.1
41-50	8.2	5.0	23.5	21.7	20.6
51-65	7.2	3.3	21.1	13.0	16.3
Sex				(ns)	(***)
Male	9.4	5.5	51.3	52.5	51.9
Female	9.2	5.2	48.7	47.5	48.1
Race				(*)	(**)
White	8.8	5.0	65.7	60.9	62.2
Black	10.5	6.0	30.4	34.2	34.2
Other	9.1	7.1	3.2	4.2	3.1
Missing	6.8	5.4	0.7	0.7	0.5
Primary impairment				(***)	(***)
Musculoskeletal	8.5	4.6	7.9	6.8	7.2
Neurological	9.9	6.5	4.6	5.6	4.9
Mental	10.2	6.1	52.0	58.7	56.7
Other	9.9	5.3	24.0	23.7	25.5
Missing	4.6	2.4	11.5	5.2	5.7
SSI/SSDI benefit receipt prior to solicitation				(***)	(***)
<2 yrs	10.2	5.8	14.1	15.2	15.4
2-5 yrs	10.9	6.7	28.2	35.0	32.9
>5 yrs	8.3	4.6	57.6	49.7	51.7
Overall	9.3	5.4	100.0	100.0	100.0
Sample Size	11,001	11,001	11,001	591	1,024

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

impairments among SSDI beneficiaries. Higher rates of preapplication and participation among two- to five-year recipients are seen in all three of the ongoing groups.

3.9.2 Variations by site

In all eight sites, those over age 50 are less likely than younger individuals to preapply and to participate (Exhibits 3.13 through 3.20). The highest preapplication and participation rates are sometimes seen among those under 30 (Dallas, Fort Worth, New Hampshire), sometimes among those in their thirties (Phoenix/Las Vegas, Tampa/Carrollwood, Spokane/Coeur d'Alene), and sometimes among those in their forties (Minneapolis). In Richmond, the youngest group was most likely to preapply but those in their thirties were more likely to participate. Higher preapplication and participation rates for males were found in all sites but Richmond.

Racial patterns, like those for age, varied by site. In one site whites were more likely to preapply and participate than other groups (Minneapolis), in three other sites they were less likely (Fort Worth, Richmond, Tampa/Carrollwood), and in the remaining four there was practically no difference (Dallas, Phoenix/Las Vegas, New Hampshire, Spokane/Coeur d'Alene).

With regard to primary impairment, preapplication and participation was most common among those with neurological impairments in Fort Worth, Phoenix/Las Vegas, Richmond, and Tampa/Carrollwood, and among those with mental impairments in Dallas and New Hampshire. In Minneapolis and Spokane/Coeur d'Alene, the groups most likely to preapply were those with "other" primary impairments and those with neurological impairments, respectively, while those with mental impairments were most likely to participate.

Finally, the concentration of preapplicants and participants among two- to five-year recipients observed in the overall sample was seen in Dallas, New Hampshire, Richmond, and Tampa/Carrollwood. Those who had received benefits for up to two years, or those who were just beginning, were equally more likely to preapply and participate in Fort Worth, Phoenix/Las Vegas, Minneapolis, and Spokane/Coeur d'Alene.

3.9.3 Young SSI applicants and recipients

This subgroup, like the population as a whole, had significantly higher preapplication and participation rates among males than among females (Exhibit 3.21). Whites were less likely to preapply, but more likely to participate, than blacks. Those with musculoskeletal impairments were more likely than others to preapply and to participate. Individuals who had received benefits for less than two years (but not first-time applicants) were just as likely to participate as those who had received benefits for two to five years, and a little more likely to preapply.

Exhibit 3.13
Preapplication and Participation Rates by Site: Dallas

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	10.2	7.3	17.5	24.1	21.0
31-40	10.2	6.7	25.4	32.0	30.7
41-50	8.0	4.8	27.0	24.2	25.5
51-65	6.4	3.5	30.1	19.6	22.8
Sex				(ns)	(**)
Male	9.0	5.7	55.3	59.7	58.6
Female	7.8	4.8	44.7	40.3	41.4
Race				(ns)	(ns)
White	8.3	5.2	50.6	49.7	49.7
Black	8.8	5.3	43.1	43.0	44.7
Other	7.8	6.4	4.6	5.5	4.2
Missing	6.4	5.5	1.8	1.8	1.4
Primary impairment				(**)	(***)
Musculoskeletal	9.2	5.3	15.3	15.2	16.6
Neurological	8.2	4.8	5.9	5.3	5.7
Mental	9.3	6.1	28.3	32.4	31.1
Other	8.2	5.2	42.3	41.1	40.9
Missing	5.8	3.9	8.2	6.1	5.7
SSI/SSDI benefit receipt prior to solicitation				(ns)	(**)
0 mos	9.0	5.4	25.3	25.9	26.9
<2 yrs	8.4	5.2	22.3	22.0	22.2
2-5 yrs	9.4	5.9	21.3	23.8	23.8
>5 yrs	7.4	4.8	31.1	28.4	27.1
Overall	8.4	5.3	100.0	100.0	100.0
Sample Size	17,384	17,384	17,384	924	1,468

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.14
Preapplication and Participation Rates by Site: Fort Worth

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	12.3	6.1	15.8	20.6	19.1
31-40	11.6	5.9	23.9	30.0	27.2
41-50	10.1	4.6	28.0	27.1	27.6
51-65	8.3	3.3	32.3	22.3	26.1
Sex				(**)	(*)
Male	10.6	5.1	55.6	59.8	58.0
Female	9.7	4.3	44.4	40.2	42.0
Race				(**)	(**)
White	9.9	4.4	74.2	69.2	72.3
Black	11.6	6.0	20.2	25.8	23.0
Other	8.2	4.3	4.0	3.7	3.2
Missing	8.7	3.7	1.6	1.3	1.4
Primary impairment				(**)	(**)
Musculoskeletal	10.3	4.0	18.8	16.1	18.9
Neurological	11.0	5.5	6.2	7.2	6.7
Mental	10.4	5.6	29.7	35.2	30.3
Other	10.6	4.5	37.2	35.7	38.8
Missing	6.6	3.3	8.2	5.7	5.3
SSI/SSDI benefit receipt prior to solicitation				(**)	(***)
0 mos	12.3	5.2	22.5	24.7	27.0
<2 yrs	8.6	3.6	19.5	15.0	16.5
2-5 yrs	11.7	5.3	23.9	26.8	27.4
>5 yrs	8.7	4.6	34.2	33.5	29.1
Overall	10.2	4.7	100.0	100.0	100.0
Sample Size	13,320	13,320	13,320	627	1,358

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.15
Preapplication and Participation Rates by Site: Phoenix/Las Vegas

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	5.3	3.6	17.4	18.5	18.1
31-40	6.2	4.4	24.5	31.3	29.5
41-50	5.2	3.5	27.1	27.9	27.6
51-65	4.1	2.4	31.0	22.2	24.9
Sex				(ns)	(**)
Male	5.5	3.5	57.3	59.6	60.9
Female	4.7	3.2	42.7	40.4	39.1
Race				(*)	(ns)
White	5.1	3.4	78.8	78.1	77.5
Black	5.8	3.8	11.3	12.7	12.7
Other	4.7	2.7	7.6	6.1	7.0
Missing	6.2	4.6	2.3	3.1	2.8
Primary impairment				(***)	(***)
Musculoskeletal	5.6	3.3	14.6	14.1	15.8
Neurological	6.4	4.0	5.2	6.1	6.4
Mental	5.3	3.7	36.9	39.7	37.9
Other	5.3	3.6	33.1	34.9	34.1
Missing	2.9	1.7	10.2	5.1	5.7
SSI/SSDI benefit receipt prior to solicitation				(ns)	(***)
0 mos	5.8	3.7	22.4	24.3	25.3
<2 yrs	5.9	3.8	20.0	22.2	22.8
2-5 yrs	5.0	3.1	23.2	21.4	22.5
>5 yrs	4.4	3.2	34.4	32.1	29.5
Overall	5.2	3.4	100.0	100.0	100.0
Sample Size	24,520	24,520	24,520	836	1,263

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.16
Preapplication and Participation Rates by Site: Minneapolis

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	3.7	2.5	22.9	15.9	15.8
31-40	6.0	4.1	30.3	33.7	33.5
41-50	6.9	4.8	25.3	33.1	32.6
51-65	4.6	2.9	21.4	17.3	18.1
Sex				(ns)	(**)
Male	5.7	3.8	56.5	58.9	60.1
Female	5.0	3.4	43.5	41.1	39.9
Race				(***)	(***)
White	5.9	4.0	62.7	68.1	68.2
Black	5.2	3.5	26.4	25.3	25.3
Other	2.7	1.8	7.5	3.8	3.8
Missing	4.3	3.0	3.3	2.8	2.6
Primary impairment				(**)	(***)
Musculoskeletal	4.9	3.5	7.7	7.2	7.0
Neurological	4.7	2.7	5.2	3.8	4.5
Mental	5.6	3.9	55.4	58.8	57.4
Other	5.9	3.8	22.0	23.1	24.2
Missing	3.8	2.6	9.8	7.0	6.8
SSI/SSDI benefit receipt prior to solicitation				(***)	(***)
0 mos	3.7	2.4	21.4	14.0	14.6
<2 yrs	5.9	4.0	16.6	18.1	18.0
2-5 yrs	6.0	4.2	22.7	26.2	25.3
>5 yrs	5.8	3.9	39.3	41.7	42.1
Overall	5.4	3.7	100.0	100.0	100.0
Sample Size	23,803	23,803	23,803	869	1,285

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.17
Preapplication and Participation Rates by Site: New Hampshire

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	8.7	6.6	28.9	35.6	33.7
31-40	8.1	5.9	25.7	27.9	27.8
41-50	7.5	5.4	23.6	23.6	23.8
51-65	5.1	3.2	21.8	13.0	14.7
Sex				(ns)	(ns)
Male	7.9	5.5	48.6	49.5	51.3
Female	7.1	5.3	51.4	50.5	48.7
Race				(ns)	(ns)
White	7.6	5.5	87.5	89.0	88.8
Black	8.3	4.1	1.8	1.4	2.0
Other	3.1	1.9	1.7	0.6	0.7
Missing	7.0	5.4	9.1	9.0	8.5
Primary impairment				(***)	(***)
Musculoskeletal	8.4	5.3	13.2	13.0	14.9
Neurological	6.6	4.8	6.4	5.7	5.7
Mental	8.6	6.4	45.0	53.4	51.8
Other	6.7	4.9	26.2	24.0	23.5
Missing	3.3	2.3	9.2	3.9	4.1
SSI/SSDI benefit receipt prior to solicitation				(***)	(***)
0 mos	8.2	5.3	44.9	44.6	49.6
<2 yrs	7.3	5.8	11.6	12.6	11.3
2-5 yrs	9.2	7.5	15.6	21.8	19.3
>5 yrs	5.3	4.1	27.8	21.0	19.8
Overall	7.5	5.4	100.0	100.0	100.0
Sample Size	9,457	9,457	9,457	509	706

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.18
Preapplication and Participation Rates by Site: Richmond

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	13.5	6.7	18.0	22.4	22.6
31-40	13.3	7.3	23.9	32.4	29.5
41-50	10.6	5.4	26.9	27.1	26.4
51-65	7.4	3.1	31.2	18.1	21.5
Sex				(ns)	(ns)
Male	10.5	5.3	53.5	52.7	52.4
Female	11.0	5.5	46.5	47.3	47.6
Race				(***)	(***)
White	9.0	4.4	44.7	36.7	37.3
Black	12.4	6.3	52.1	60.4	59.9
Other	8.9	4.9	1.2	1.1	1.0
Missing	9.6	5.1	2.0	1.9	1.8
Primary impairment				(***)	(***)
Musculoskeletal	10.2	4.7	11.8	10.2	11.2
Neurological	12.2	6.6	5.0	6.1	5.7
Mental	12.0	6.4	37.2	43.8	41.5
Other	10.9	5.3	33.8	33.4	34.3
Missing	6.4	2.9	12.2	6.4	7.3
SSI/SSDI benefit receipt prior to solicitation				(***)	(***)
0 mos	11.2	5.1	21.1	20.0	22.0
<2 yrs	11.4	6.2	16.8	19.2	17.8
2-5 yrs	13.0	6.8	21.8	27.4	26.3
>5 yrs	9.0	4.5	40.2	33.4	33.8
Overall	10.8	5.4	100.0	100.0	100.0
Sample Size	18,652	18,652	18,652	1,009	2,008

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.19
Preapplication and Participation Rates by Site: Tampa/Carrollwood

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	9.5	4.4	20.7	22.6	22.1
31-40	11.0	5.6	24.4	33.8	30.2
41-50	8.8	4.3	25.8	27.2	25.6
51-65	6.7	2.3	29.1	16.4	22.0
Sex				(***)	(**)
Male	9.4	4.6	55.0	62.0	58.4
Female	8.2	3.4	45.0	38.0	41.6
Race				(**)	(***)
White	8.6	3.8	60.6	57.1	59.0
Black	9.8	4.6	32.5	36.7	36.1
Other	7.3	4.3	4.8	5.1	4.0
Missing	4.3	2.1	2.1	1.1	1.0
Primary impairment				(***)	(***)
Musculoskeletal	8.3	3.5	12.7	10.8	11.8
Neurological	9.6	4.7	4.4	5.2	4.8
Mental	9.3	4.3	33.4	35.2	35.0
Other	9.4	4.5	37.8	41.4	40.0
Missing	6.4	2.6	11.7	7.5	8.4
SSI/SSDI benefit receipt prior to solicitation				(***)	(***)
0 mos	7.4	3.8	32.4	29.9	26.8
<2 yrs	9.9	4.0	15.1	15.0	16.8
2-5 yrs	11.6	5.3	19.4	25.2	25.2
>5 yrs	8.4	3.7	33.1	29.9	31.2
Overall	8.9	4.1	100.0	100.0	100.0
Sample Size	22,728	22,728	22,728	926	2,019

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.20
Preapplication and Participation Rates by Site: Spokane/Coeur d'Alene

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Age				(***)	(***)
16-30	11.1	5.3	17.4	17.2	17.3
31-40	13.7	6.9	24.3	31.4	29.8
41-50	11.0	5.8	28.5	31.1	28.0
51-65	9.3	3.6	29.9	20.3	24.9
Sex				(ns)	(ns)
Male	11.3	5.4	58.0	58.8	59.0
Female	10.9	5.2	42.0	41.2	40.9
Race				(ns)	(*)
White	11.2	5.3	91.7	91.8	92.4
Black	10.0	4.8	2.3	2.1	2.0
Other	8.1	4.6	3.5	3.0	2.5
Missing	13.3	6.6	2.5	3.1	3.0
Primary impairment				(***)	(***)
Musculoskeletal	10.8	4.8	18.3	16.7	17.9
Neurological	12.4	5.3	6.2	6.2	6.9
Mental	12.1	6.3	37.2	44.1	40.5
Other	11.2	5.1	27.7	26.6	27.8
Missing	7.3	3.2	10.6	6.4	7.0
SSI/SSDI benefit receipt prior to solicitation				(***)	(***)
0 mos	8.0	3.2	13.6	8.1	9.8
<2 yrs	13.3	5.4	15.5	15.7	18.6
2-5 yrs	13.2	6.8	25.9	33.1	30.6
>5 yrs	10.2	5.1	45.0	43.0	41.1
Overall	11.1	5.3	100.0	100.0	100.0
Sample Size	15,540	15,540	15,540	827	1,731

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

Exhibit 3.21
Preapplication and Participation Rates by Personal Characteristics: Young SSI Applicants and Recipients

Characteristic	Proportion of eligibles with characteristic that...		Frequency of characteristic among...		
	Preapplied	Participated	Eligibles	Participants	Preapplicants
Sex					
Male	8.4	5.0	54.2	59.1 (**)	56.8 (**)
Female	7.5	4.1	45.8	40.9	43.2
Race					
White	8.2	4.8	59.4	62.0 (*)	60.5 (***)
Black	8.5	4.5	30.2	29.7	32.1
Other	5.4	3.1	6.7	4.6	4.6
Primary impairment					
Musculoskeletal	9.5	5.1	6.0	6.7 (**)	7.2 (***)
Neurological	9.1	4.6	6.4	6.4	7.3
Mental	8.0	4.9	52.3	55.2	52.2
Other	8.4	4.7	25.0	25.3	26.1
Missing	5.6	2.8	10.2	6.3	7.1
SSI/SSDI benefit receipt prior to solicitation					
0 mos	7.7	4.3	47.6	44.8 (**)	46.1 (**)
<2 yrs	9.3	5.3	12.2	14.0	14.2
2-5 yrs	9.0	5.3	14.2	16.5	16.0
>5 yrs	7.3	4.4	26.0	24.7	23.7
Overall	8.0	4.6	100.0	100.0	100.0
Sample Size	18,883	18,883	18,883	869	1,512

ns: Distribution not statistically significantly different from eligibles at the 10 percent level.

* Distribution statistically significantly different from eligibles at the 10 percent level.
** Distribution statistically significantly different from eligibles at the 5 percent level.
*** Distribution statistically significantly different from eligibles at the 1 percent level.

3.10 Conclusions

Overall, 8.1 percent of eligible individuals indicated interest in Project NetWork and had an informational interview within a year of solicitation; 4.5 percent went on to participate. This level implies that differences of even one or two percentage points correspond to major differences in participation.

With regard to beneficiary type, higher participation rates were found among concurrent beneficiaries, and lower rates among SSI applicants and recipients, with SSDI beneficiaries falling in the middle. The young SSI population had a participation rate virtually identical to that of the rest of the eligible population.

Personal characteristics that were associated with a higher likelihood of participation were nearly all indicators of greater employability or less disability. These included:

- age between 31 and 40;
- greater education;
- absence of functional disabilities with respect to communication, mobility, ADLs, and IADLs;
- better health;
- better cognitive ability;
- fewer days spent in bed in the past year;
- no more than partial limitation on amount, type, or intensity of work that the individual could do;
- absence of transportation problems in getting to work;
- having worked recently;
- having worked 30 hours per week in a job in the past 12 months; and
- positive attitudes toward work and life in general, and a greater sense of control.

A few characteristics that were significantly associated with a greater likelihood of participation that were *not* necessarily indicators of greater employability were:

- gender (male);

- race (black);
- having received disability benefits for two to five years;
- having a mental rather than a physical disability (and having ever been hospitalized for an emotional problem); and
- illegal use of drugs.

Examination of patterns of participation by programmatic characteristics adds some additional detail. SSI applicants differed from ongoing recipients and SSDI beneficiaries in that preapplicants and participants were more likely to be in their forties, to be male, and to have musculoskeletal impairments. The sites showed great diversity in patterns of participation by age, race, primary impairment, and length of receipt of disability benefits.

None of the characteristics examined identified participants very precisely. Three of the best indicators that a person would *not* participate were presence of severe ADL or IADL disabilities, never having worked, and reportedly being unable to work. The best indicator that a person *would* participate was having worked more than 30 hours per week in a job in the past 12 months.

This suggests that, from the standpoint of participation, the eligible population can be divided into three groups:

- those who have severe ADL or IADL disabilities, have never worked, or are reportedly unable to work (very unlikely to participate);
- those who worked more than 30 hours per week in a job in the last 12 months, do *not* have severe ADL or IADL disabilities, and are reportedly able to work (quite likely to participate); and
- the remainder of the population, i.e. those who do not have severe ADL or IADL disabilities and are reportedly able to work, but did not work at least 30 hours per week in a job in the last 12 months (moderately likely to participate).

These three groups comprise 73 percent, 3 percent, and 24 percent of the eligible population respectively. Their respective Project NetWork participation rates are 2.6 percent, 12.2 percent, and 9.1 percent. Thus, we see that there is a large proportion of the eligible population (73 percent) that is quite unlikely to participate, that can be identified by their ADL or IADL disabilities, lack of work history, and reported inability to work. The remaining quarter of the eligible population is much more likely to participate (9.5 percent participation rate overall); but it is hard to sift this 27 percent further into subgroups that have dramatic differences in rates of participation.

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APPENDIX A
ANALYSIS SAMPLES

This appendix describes the construction of the analysis samples used in this report and the calculation of weights used for the baseline survey.

A.1 Administrative Data

In principle, the preapplication and participation rates should be expressed as percentages of *all individuals who applied for SSI in a participating site or were SSI recipients or SSDI beneficiaries solicited by mail during the sample intake period*. Unfortunately, although SSA generated electronic lists for each quarterly mail solicitation, these electronic records were lost during the early phase of the demonstration. In addition, no electronic records were maintained to document which new SSI applicants were solicited for Project Network. As a result, the data base development effort used to create the analysis sample relied on the simulated recreation of the universe of Project Network eligibles, using information about the schedule for mail solicitation in each demonstration site, the timing of solicitation of new SSI applicants, and administrative data on the receipt of SSI and SSDI benefits. Specifically, the analysis sample was constructed by including individuals who, according to administrative records:

- applied for SSI during the sample intake period; or
- were receiving SSI or SSDI benefits in the month prior to the scheduled mail solicitation.

A total of 8,248 individuals volunteered for the demonstration and were randomly assigned to treatment and control groups. However, in constructing the analysis sample we found that 1,451 of these individuals do not appear to have been solicited for the demonstration; that is, they did not meet the criteria stated above. These individuals may have been recruited through other methods (referred from other agencies, word of mouth, or walk-ins). For purposes of this analysis, they were excluded from the universe of eligibles. The reason for this exclusion is that we cannot include their unobserved counterparts who also learned about the demonstration by other means and did *not* volunteer. To include the walk-ins but not their counterparts would give a misleadingly high estimate of the participation rate.

In addition, we have counted as preapplicants only those who were interviewed within 12 months of solicitation, and as participants, only those who were both interviewed and randomly assigned within 12 months of solicitation. A handful of cases with missing interview or random assignment dates were dropped from the analysis. As a result of these various exclusions, the total count of participants in this analysis is 6,527, and the total number of eligibles is 145,404.

Many of the analyses reported in Chapter Three use administrative data to compare preapplicants, participants, and eligibles, and the rates of preapplication and participation according to key programmatic and personal characteristics. Data on these characteristics were extracted from SSA program records from the month preceding the scheduled solicitation for the demonstration.[1] The reported characteristics (e.g., number of months disability benefits were received) therefore pertain to that month.

A.2 Baseline Survey Data

A subset of SSI applicants, SSI recipients, and SSDI beneficiaries were administered a baseline survey shortly after solicitation. The survey is a rich source of information on individual characteristics that could be related to the participation decision: health, functional limitations, work history, and so on. The survey heavily oversampled Project NetWork participants, especially SSI applicants and recipients under age 30, and also suffered from a very high nonresponse rate among nonparticipants.[2] Survey responses have therefore been weighted to correspond to the joint distribution among the 145,404 eligibles of four key variables:

- Model
- Beneficiary type (SSI applicant, SSI recipient, SSDI beneficiary, concurrent beneficiary)
- Young SSI (applicants and recipients up to age 30)
- Participant status (yes or no).

1 As previously discussed, in some cases, the actual solicitation dates deviated from the scheduled solicitation dates due to administrative constraints in implementing the mailings and processing responses.

2 A total of 3,439 interviews were completed for the baseline survey, including 2,555 participants and 884 nonparticipants. Survey response rates were 87 percent for participants, 53 percent for nonparticipating beneficiaries and recipients, and 49 percent for nonparticipating SSI applicants.

Thus, by construction the weighted overall participation rate in the survey sample is the same as in the full sample of eligibles, as is the participation rate by model, by beneficiary type, and by young SSI status.[3]

The young SSI population has been defined for the analyses in this report as applicants and recipients *up to age 30*. Interest focussed on the young SSI population from the beginning of the demonstration because it was felt that Project NetWork might be particularly attractive to and effective for these individuals. As described in Chapter Two, special outreach efforts were extended to SSI applicants and recipients aged *up to age 24*, and it was originally intended that the subpopulation so defined would be the subject of special impact analyses. Because response among young SSI applicants and recipients was not as great as expected, however, the baseline and followup surveys ultimately used an age cutoff of 30 for oversampling, and the impact analyses based on these surveys likewise use this higher cutoff for defining the population.

For the purpose of developing sample weights for the survey, it was of course necessary to define young SSI status as it had been defined in the survey sample, e.g. up to age 30. It was furthermore decided that for consistency with the impact analyses, this same cutoff should be used in the participation analyses *per se*. While it is true that members of the "young SSI" population aged 25 to 30 did not receive special outreach, it is also true, as mentioned in Chapter Two, that many of those aged 24 or less also did not receive it. The "young SSI" group should therefore be interpreted as a population *some* of whom received special outreach, but *all* of whom were expected to be especially promising candidates for Project NetWork.

Some items in the survey were not collected on individuals who responded *via* a proxy (12 percent of the weighted sample). The individuals with proxy respondents were clearly not a random subset of the population; use of a proxy is presumably a signal of some sort of disability. For example, 46 percent of the individuals with proxy respondents had a IADL disability score of 3 or more ("severe") compared with less than 20 percent of individuals who did not use a proxy. Furthermore, the participation rate for this group was only 1.5 percent, *versus* 4.9 percent for the rest of the population.

The eligibles with proxy respondents necessarily form a distinct and special subgroup for such measures as mental status, drug use, and other variables which can only be collected from the respondents themselves. The tabulations and significance tests for these factors were therefore performed excluding the proxy respondents.

3 Sample weights were previously developed for the baseline survey that corresponded to the probability of selection *within the sample frame*. For a variety of reasons the sample frame did not correspond to the universe of eligibles. The weights have therefore been recalculated for this report to ensure that the survey sample (after deletion of ineligibles) matches the universe of eligibles with respect to the four characteristics mentioned above.

To develop the weights used in this analysis, all solicited individuals were partitioned into 56 cells, corresponding to all combinations of participation status, young SSI status, model, and beneficiary type at time of solicitation. (Because young SSI could only be SSI applicants, SSI beneficiaries, or concurrent beneficiaries, there were 56 cells instead of 64.) Each individual in the baseline survey was then assigned a cell weight equal to the number of individuals in the corresponding cell in the full solicitee file divided by the corresponding number in the survey file. For example, the baseline survey contained 59 Project NetWork participants who were SSI applicants under age 30 in the Model 1 sites, while the administrative file contained 124 such individuals. Hence each such person in the survey was assigned a weight of 2.102 (=124/59).